

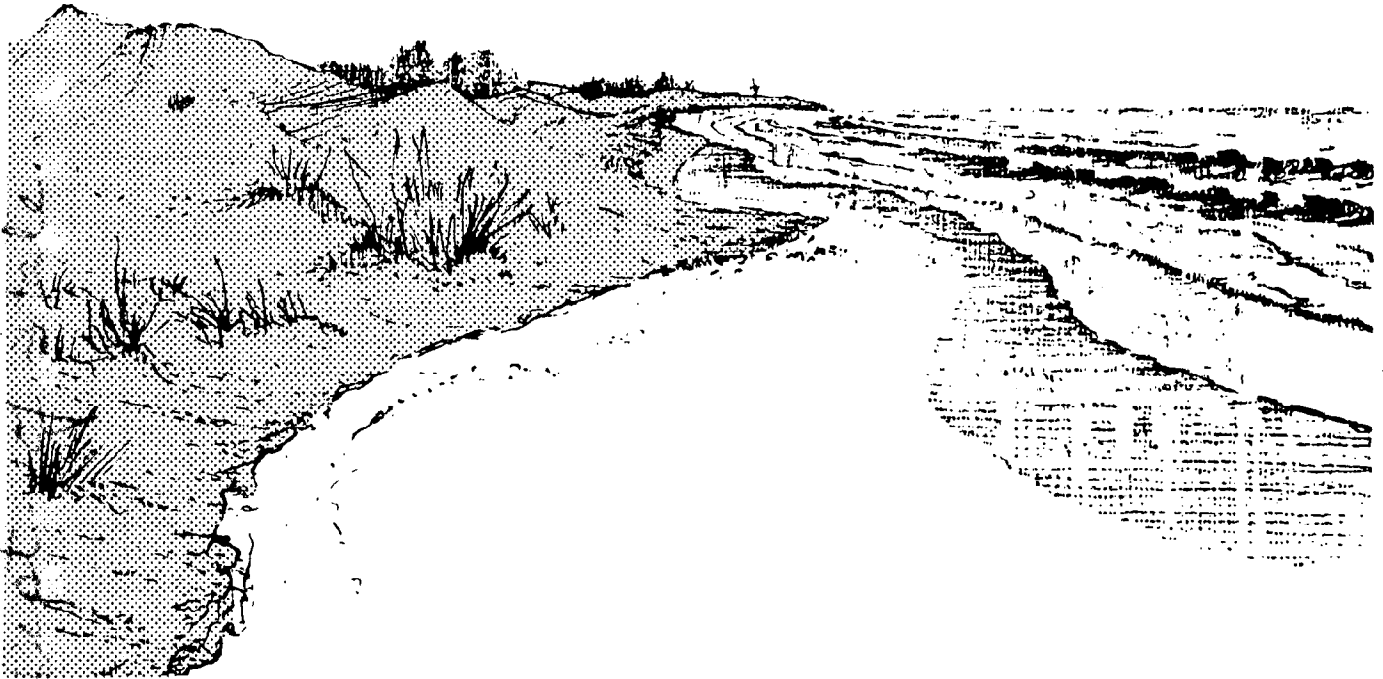
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COASTAL ZONE MANAGEMENT SECOND YEAR REPORT

ERIE AND NIAGARA COUNTIES
NEW YORK



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COASTAL ZONE MANAGEMENT SECOND YEAR REPORT
ERIE AND NIAGARA COUNTIES, NEW YORK

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PREFACE

The purpose of this report is to present technical information identified during the Erie and Niagara Counties Regional Planning Board's (ENCRPB) Second Year Coastal Zone Management Work Program. This work program was based on a contract with the New York State Department of State and included the following work tasks:

- Task 3.1 Organize and operate an Erie-Niagara Counties citizen participation committee structure
- Task 3.2 Continue the Erie-Niagara Counties CZM Public "Outreach and Feedback" Program
- Task 7.3 Identify and map geographic areas of particular concern outside the City of Buffalo
- Task 7.4 Develop criteria for permissible uses and priority uses for each area of particular concern outside the City of Buffalo
- Task 8.1 Identify potential conflicts between natural resource considerations and economic or other activities outside the City of Buffalo and propose methods for resolving the conflicts
- Task 8.10 Identify the need for and siting of existing, proposed and projected regional facilities in the coastal zone outside the City of Buffalo

Separate reports were written for each of these work tasks. The reports for Tasks 3.1 and 3.2 describe the ENCRPB's public participation structure that was utilized during the Second Year CZM Program. These reports also document the meetings, presentation materials, and mailings that were used to solicit input from citizens and officials. This information, however, was extraneous to the technical data developed for the management program and therefore has not been included in this document.

Contained in this document is the technical information that was developed for Tasks 7.3, 7.4, 8.1 and 8.10. The format includes separate sections for each of these four tasks. Each section represents the report that was written for that work task. They have their own numbering system as well as their own attachments. The sections correspond to the work tasks and are numbered as follows:

<u>Section</u>	<u>Corresponding Work Task</u>	<u>Page Numbers</u>
I	7.3	I-1 through I-128
II	7.4	II-1 through II-59
III	8.1	III-1 through III-9
IV	8.10	IV-1 through IV-22

Although the information developed for Tasks 3.1 and 3.2 has not been included in this document, the ENCRPB's public participation program is summarized in this preface. The citizen participation program was instrumental in helping to develop the technical information for Tasks 7.3, 7.4, 8.1 and 8.10. First, the citizens and officials attending the citizen participation meetings were a source of technical information. Secondly, these citizens and officials helped to determine priorities in developing this information.

A key element in the ENCRPB citizen participation structure was the formation of a CZM Subcommittee. This Subcommittee was comprised of anyone throughout Erie and Niagara Counties who wanted to be a member. The membership presently contains well over one hundred citizens and officials. This Subcommittee functions as a decision-making forum for Coastal Zone Management matters.

Recommendations from this Subcommittee are forwarded to the 208 Steering Committee for input and then to the ENCRPB's 208 Water Quality/Utilities Committee. The 208 Steering Committee functions as an advisory body on both Coastal Zone and 208 Water Quality Program matters. It is comprised of citizens and officials appointed by the ENCRPB chairman to represent a broad base of interest groups and governmental agencies. The 208 Water Quality/Utilities Committee is comprised of Regional Planning Board members that are responsible for the Board's Coastal Zone Management and 208 Water Quality Program efforts.

The "Outreach and Feedback" Program described under Task 3.2 entailed a variety of meetings that were held in addition to the citizen participation structure. Many of these meetings were with municipal/county/industrial officials to keep them informed and solicit their input. Key officials who had not attended the meetings for Task 3.1 were able to participate through Task 3.2.

In addition to the reports for Tasks 3.1 and 3.2, certain resource maps completed for Task 7.3 have not been included in this document. Due to their size, it was not practical to include them. They are described, however, in Part D of Section I (Task 7.3). Copies of these maps are available for viewing at the Erie and Niagara Counties Regional Planning Board Office.

* * * * *

SECTION I

GEOGRAPHIC AREAS OF PARTICULAR CONCERN

A. INTRODUCTION

1. SCOPE AND PURPOSE - This section focuses on the identification of geographic areas of particular concern (GAPC's) in the Erie and Niagara Counties coastal zone (exclusive of the City of Buffalo). Information has been included on the identification process as well as on the GAPC's identified. Those GAPC's that qualify as areas for preservation or restoration (APR's) are also identified.

The identification and mapping of specific areas identified in Task 7.3 have also been incorporated into this report. Included are:

- (a) scenic and aesthetic areas
- (b) prime and unique agricultural areas
- (c) commercial and industrial uses
- (d) water and sewer service
- (e) general land use
- (f) drainage basin/watershed boundaries
- (g) sensitive natural features
- (h) historic/archeologic sites
- (i) areas with unique problems
- (j) areas having problems which demand immediate attention

The purpose of this section is to identify specific areas in the Erie-Niagara coastal zone that are of major importance (or concern) to this region as well as the State. These areas of importance (termed "geographic areas of particular concern") will receive priority in the development and implementation of a coastal zone management (CZM) program. In addition to identifying areas that have been specifically designated as GAPC's this report also identifies other resource areas (or types) and features that should receive priority in the CZM program. These other areas and features have been listed in the preceding paragraph.

2. METHODOLOGY.- The main body of this section covers geographic areas of particular concern (Subsection B), areas for preservation or restoration (Subsection C), and resource mapping (Subsection D). The identification process and methodology used for each of these sections is different. Because of these differences the specific methodology has been incorporated into the text of each of those sections.

3. RELATIONSHIP TO ENCRPB CZM PROGRAM - During the Board's first year work program, certain coastal zone resources and related factors were identified, mapped and analyzed. This data along with resource information developed for Task 7.3 in the Second Year program (see Subsection D) has provided a basis for identifying areas of specific importance in the Erie-Niagara coastal zone. Through the Board's citizen committee structure, these areas of importance have been identified as GAPC's and resource types (Task 7.4).

As previously mentioned, these areas of importance will receive priority in the development and implementation of the coastal zone management program. As an example, these areas would generally be under more stringent land/water use controls than other areas (coastal zone areas outside of GAPC's and resource types). Also, these areas of importance would receive priority for any federal/state funds to be made available for implementing coastal zone management.

B. GEOGRAPHIC AREAS OF PARTICULAR CONCERN

1. IDENTIFICATION CRITERIA - One of the first tasks in identifying geographic areas of particular concern (GAPC's) was to develop criteria that could be used in the identification process. Utilizing the federal CZM legislation and CZM threshold papers, criteria for designating GAPC's was identified. This information was incorporated into a handout for public distribution through the citizen committee structure identified in Task 3.1. The purpose of this handout was to provide the citizens and officials participating in the CZM program with a format for designating GAPC's. A copy of this handout has been included as Attachment 1.

The above-noted criteria were further analyzed by the Regional Planning Board's staff so as to develop a framework for looking at proposed GAPC's identified through the citizen committee structure. An ENCRPB memorandum which was written as a result of this analysis is included as Attachment 2.

2. IDENTIFICATION PROCESS - As indicated in Task 3.1, the citizen committee structure developed in this region has played an important role in identifying information for the Erie-Niagara CZM program. The citizen committees were involved in the identification of GAPC's in two distinct ways. First, the committee provided suggestions for GAPC's and technical

information on those suggestions. Secondly, the committees provided an initial level of decision making to determine which suggested GAPC's should be identified.

The actual identification process was initiated through suggestions for possible GAPC's. Sources of these suggestions included the ENCRPB staff, members of the citizen committees (i. e. CZM Subcommittee and area work groups), governmental plans and programs, and the agencies/groups contacted through Task 3.2. These suggested GAPC's were first analyzed through the work groups (i. e. Lake Ontario, Lower Niagara River, Upper Niagara River, and Lake Erie Work Groups).

Decisions by the work groups on suggested GAPC's were forwarded to the CZM Subcommittee as recommendations. The recommended GAPC's from the four work groups were then approved or rejected by the CZM Subcommittee. GAPC's approved by the Subcommittee were then approved or rejected by the 208 Steering Committee. GAPC's approved by the 208 Steering Committee were then transmitted to the Regional Planning Board's 208 Water Quality Committee for approval. This committee structure has been further described in the report covering Task 3.1.

The process used to identify GAPC's is a continuing process. As other elements of a coastal zone management program were developed, new suggestions for GAPC's could be identified and addressed through this process. The process thus permits flexibility while utilizing a comprehensive approach in soliciting input from regional citizens and officials.

3. AREAS IDENTIFIED - Utilizing the above noted process and criteria, several GAPC's have been identified. These GAPC's have been listed below by work group area.

a. Lake Ontario - The following list includes those GAPC's identified along Lake Ontario within Niagara County.

- (1) Golden Hill State Park-Town of Somerset, Niagara County
- (2) Olcott Harbor-Town of Newfane, Niagara County
- (3) Wilson-Tuscarora Bay-Town of Wilson, Niagara County
- (4) Wilson-Tuscarora State Park-Town of Wilson, Niagara County
- (5) Four Mile Creek State Park-Town of Porter, Niagara County

b. Lower Niagara River - The following list includes those GAPC's identified along Lower Niagara River within Niagara County.

- (1) Fort Niagara State Park-Town of Porter, Niagara County
- (2) Youngstown Harbor-Village of Youngstown, Niagara County
- (3) Lower River Scenic Residential Coastal Area-Towns of Porter and Lewiston, Niagara County
- (4) Stella Niagara Drift Area-Town of Lewiston and Town of Porter, Niagara County
- (5) Joseph Davis State Park-Town of Lewiston, Niagara County
- (6) Chemtrol Waste Disposal Area-Town of Porter, Niagara County
- (7) Lewiston Art Park-Town of Lewiston, Niagara County
- (8) Power Authority State of New York Facilities-Towns of Lewiston and Niagara, Niagara County
- (9) Whirlpool State Park-City of Niagara Falls, Niagara County
- (10) Devils Hole State Park- Town of Lewiston, Niagara County
- (11) Niagara River Gorge-City of Niagara Falls, Niagara County

c. Upper Niagara River - The following list includes those GAPC's identified along the Upper Niagara River .

- (1) Niagara Reservation State Park-City of Niagara Falls, Niagara County
- (2) Power Authority State of New York (Water Intakes)-City of Niagara Falls, Niagara County
- (3) Love Road Canal-City of Niagara Falls, Niagara County

- (4) Griffon Park and Proposed Extension-City of Niagara Falls, Niagara County
- (5) City of North Tonawanda Coastal Open Space Area-City of North Tonawanda, Niagara County
- (6) Tonawanda Island-City of North Tonawanda, Niagara County
- (7) Tonawanda Creek/Barge Canal Area-City of North Tonawanda, Niagara County and City of Tonawanda, Erie County
- (8) Two Mile Creek Open Space Corridor-City of Tonawanda and Town of Tonawanda, Erie County
- (9) Isle View Park and Extension-City of Tonawanda and Town of Tonawanda, Erie County
- (10) Strawberry Island-Town of Tonawanda, Erie County
- (11) Buckhorn Island State Park-Town of Grand Island, Erie County
- (12) Beaver Island State Park-Town of Grand Island, Erie County
- (13) Motor Island-Town of Grand Island, Erie County

d. Lake Erie - The following list includes those GAPC's identified along Lake Erie.

- (1) Bethlehem Steel Diked Disposal Area-City of Lackawanna and Town of Hamburg, Erie County
- (2) Seneca Shoals-Within Lake Erie offshore of the Town of Hamburg, Erie County
- (3) Woodlawn Beach-Town of Hamburg, Erie County
- (4) Eighteenmile Creek Gorge-Towns of Hamburg and Evans, Erie County
- (5) Sturegon Point-Town of Evans, Erie County
- (6) Wendt Beach-Town of Evans, Erie County

- (7) Big Sister Creek and Little Sister Creek-Town of Evans, Erie County
- (8) Evangola State Park-Towns of Evans and Brant, Erie County

e. Regional Areas - The following GAPC is regional in nature.

- (1) Coastal Waters - U.S. portion of Lakes Erie and Ontario and the Niagara River off the coast of Erie and Niagara Counties.

Information sheets have been developed for each of the GAPC's identified to date. The format used for these sheets was determined from an analysis of threshold paper requirements. This format includes a description of the GAPC (including name, location, type, and area description) as well as an analysis of its value to the State. Copies of these information sheet have been included as Attachment 3. The GAPC's have been illustrated on the regional map entitled "Proposed Geographic Areas of Particular Concern and Areas for Preservation/Restoration" (see supplemental maps for Task 7.3).

4. SPECIAL AREAS OF NOTE - During the process of identifying GAPC's, certain areas stood out as being unique in how or why they were (or weren't) designated. These areas are listed below along with a description of why they are unique.

a. Cattaraugus Creek - During the Board's Second Year work program, the mouth of Cattaraugus Creek was nominated as a GAPC. The creek forms a boundary between Erie and Chautauqua Counties with the Erie County portion lying within the Cattaraugus Indian Reservation. Reasons for it being designated included flooding problems, its significance as a fish habitat and salmonoid stocking area, and its potential as a harbor of refuge. In addition, the U.S. Corps of Engineers has proposed a major flood control project in the mouth of the creek that would help to alleviate flooding and increase boating opportunities.

While the mouth of the creek was being reviewed as a possible GAPC, discussions were held with officials from the Cattaraugus Indian Reservation. From these discussions, it was determined that the Cattaraugus Indian Reservation is considered federal trust property. This determination was later confirmed through correspondence with the U.S. Bureau of Indian Affairs. As delineated in the CZM Threshold Papers, Indian reservation land which is federal trust property must be excluded from the CZM program. Consequently, the Cattaraugus Indian Reservation (including the Erie County

portion of Cattaraugus Creek) has been excluded from the Regional Planning Board's CZM Program.

Although the mouth of the creek has been excluded and thus is not a GAPC in the Board's CZM program, the area is of great importance to the coastal zone for the previously noted reasons. These factors directly affect the Chautauqua County side of the creek mouth which does not lie within the Cattaraugus Indian Reservation. Discussions with officials from the Chautauqua County Division of Planning indicate that the mouth of Cattaraugus Creek will be identified as an area of concern in their recommended CZM program. The findings of the ENCRPB would lend strong support to this designation.

b. Woodlawn Beach - As noted in the report written for Task 3.2, a special citizen's committee was formed to provide input on Woodlawn Beach as an area of concern. This committee was formed through the Lake Erie Work Group and consisted of Woodlawn residents as well as representatives of the Bethlehem Steel Corporation (owner of the property), Town of Hamburg, Erie County Division of Planning, and the Regional Planning Board. A major task of this committee was to provide input in behalf of area residents on possible public acquisition and utilization of the site for recreation.

As a result of the committee meetings, a dialogue was established between the residents and governmental agencies that have an interest in Woodlawn Beach. This dialogue provided input for identifying Woodlawn Beach and its acceptable/priority uses within the Board's CZM program. Continuation of this dialogue and coordination will hopefully be utilized in any future implementation plans.

c. Eighteenmile Creek Gorge (Erie County) - The identification of Eighteenmile Creek Gorge in Erie County as a possible GAPC generated a considerable amount of discussion at several Lake Erie Work Group meetings. As a result, a committee of area residents was formed to provide the Lake Erie Work Group with a recommendation on identifying the gorge as a GAPC. The committee later expanded the scope of its study to include an analysis of particular techniques (i. e. negative easements and transfer of development rights) that could be used to preserve natural open space along the gorge.

As initial input for the CZM program, the committee has recommended that the portion of the gorge from the mouth to Old Lake Shore Road be included as a GAPC. The committee will be analyzing the rest of the creek gorge in terms of how to best preserve natural open space. The implications of the CZM program will be included in this analysis. Their study may result in a recommendation to extend the GAPC designation further upstream so as to include more of the gorge.

C. AREAS FOR PRESERVATION, RESTORATION OR DEVELOPMENT

The GAPC's identified in Subsection B has been analyzed to determine the general types of activities that should occur there. The types of activity categories are based on a review of federal and state CZM guidelines and include the following:

- (1) Preservation - areas with conservation, ecological, aesthetic, historic or natural recreation values that should be preserved.
- (2) Restoration - areas that require restoration work to protect or enhance conservation, ecological, aesthetic, historic or natural recreation features.
- (3) Recreation Development - areas where recreation facilities and access to such facilities should be developed.
- (4) Economic Development - areas where industrial, commercial, tourism and other economic development projects should be undertaken.
- (5) Economic Redevelopment - areas with obsolete structures/facilities where economic redevelopment activities should take place.

The information used to determine which of these activities should occur in the GAPC's was obtained from two sources. These sources include the GAPC identification process (i.e. discussions at citizen meetings) and the research done to complete the GAPC summary sheets in Attachment 3.

The use of a general priority system has also been included with the identification of activities to occur within the GAPC's. The information from the above noted sources was used to determine the priorities. This priority system includes the following categories:

- (1) First Priority - indicates that recommended activities (i.e. preservation, restoration, development etc.) should take place as soon as possible.
- (2) Second Priority - indicates a longer term recommendation for activities and does not imply a necessity for immediate implementation.

The GAPC's along with a listing of the type, priority and general description of activities to occur within them is included in Table 1. It should be noted that the preservation of existing parks has not been listed as an activity in Table 1. The types of preservation activities included are the protection of certain natural features or values (which may occur in a park). It is strongly recommended, however, that all existing parkland be protected as such. This recommendation has been evidenced by the number of park areas that are identified as GAPC's.

Those GAPC's that have specific preservation or restoration activities listed in Table 1 can be considered to be "areas for preservation or restoration" (APR's). These areas have been identified as such on the map entitled "Proposed Geographic Areas of Particular Concern and Areas for Preservation/Restoration" which is supplemental to this report. It should be noted that these APR's include proposed policy as well as project-oriented activities. Some of the APR's also include proposed development activities (i. e. economic or recreational development).

D. RESOURCE MAPPING

In accordance with Task 7.3, several resource areas and related factors were identified and mapped as supplemental information to this report. These areas included:

- (1) scenic and aesthetic areas
- (2) prime and unique agricultural areas
- (3) commercial and industrial uses
- (4) water and sewer service
- (5) general land uses
- (6) drainage basin/watershed boundaries
- (7) sensitive natural features
- (8) historic/archeologic sites
- (9) areas with unique problems
- (10) areas having problems which demand immediate attention

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
1. Golden Hill State Park	Recreational Development	First	Development of boating, picnicking, swimming, and expanded camping facilities
	Preservation/Recreation Development	Second	Breakwater and shore protection to protect harbor for boating and recreational opportunities
2. Olcott Harbor	Economic Redevelopment	First	Redevelopment of vacant or rundown sites in Olcott Marine District for marine-oriented commercial establishments
	Preservation/Recreational Development	First	Harbor improvement project to increase boating opportunities and provide a harbor of refuge (project is proposed by the U.S. Corps of Engineers)
3. Wilson-Tuscarora Bay	Preservation	First	Preservation of sufficient depth in channel for boating
	Preservation	First	Preservation of wetland and fish habitat
	Preservation	First	Shore protection to prevent erosion along the lake shore of Sunset Peninsula
4. Wilson-Tuscarora State Park	Recreational Development	First	Development of facilities for boating, picnicking and other recreational uses
	Recreational Development	First	Development of improved access to the lakeshore and Tuscarora Bay (i.e. for pedestrians and autos)

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
5. Fourmile Creek State Park	Recreational Development	Second	Harbor/beach improvement project with dredging to provide opportunities for boating, fishing and beach activities
	Recreational Development	Second	Development of additional camping and related support facilities
6. Fort Niagara State Park	Preservation/Restoration	First	Shore protection to prevent erosion along the Lake Ontario Coast
	Recreational Development	First	Expansion and improvement of boating launching facilities within the park
7. Youngstown Harbor	Preservation/Restoration	First	Restoration and preservation of historic aspects of harbor area
	Economic Development	First	Promotion of historical area for tourism
	Preservation/Restoration	First	Shore protection to prevent erosion along the Niagara River shore
8. Chemtrol Site	Preservation/Restoration	First	Monitoring and stabilization activities to restrict contamination of and improve groundwater quality
	Preservation	First	Monitoring and enforcement of environmental standards to prevent future contamination of groundwater supply

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
9. Lower River Scenic Residential Area	Preservation	First	Policy of preserving present scenic character of the area
10. Joseph Davis State Park	Recreational Development	Second	Development of additional recreational facilities
11. Stella Niagara Drift Area	Preservation	First	Preservation of water quality through monitoring of discharges and enforcement of environmental standards
12. Lewiston Art Part			No activities beyond continuation of present facilities for performing arts
13. PASNY Facilities			No activities beyond continued maintenance of area
14. Devil's Hole State Park	Preservation/ Recreational Development	Second	Preservation and improvement where necessary of pedestrian access facilities to the gorge
15. Whirlpool State Park			No activities beyond continuation and maintenance of present recreational facilities
16. Niagara Gorge			No activities beyond continued preservation and maintenance area and improved vertical access
17. Niagara Reservation	Restoration	First	Elimination of section of Robert Moses Parkway through the reservation and restoration of pedestrian access to the Niagara River
	Preservation/ Restoration	First	Shore protection around Goat Island to prevent erosion

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
17. Niagara Reservation (Cont'd.)	Preservation/ Restoration/ Recreational Development	First	Preservation and improvement where necessary of pedestrian access facilities (including access to the gorge) No activities beyond continued maintenance of land area and overall improvement of Niagara River water quality
18. PASNY Water Intakes			
19. Griffon Park and Extension	Preservation	First	Acquisition of proposed park extension area to preserve it as shoreline open space
	Restoration	First	Stabilization or removal of chemical leachate existing in the proposed park extension area
	Recreational Development	Second	Development of recreational facilities in park extension (would become first priority after implementation of above two projects)
20. Love Road Canal	Restoration	First	Neutralization or removal of chemical wastes and leachate contained in the site
21. North Tonawanda Shoreline Open Space Area	Preservation	First	Acquisition of site to preserve it as shoreline open space
	Recreational Development	Second	Development of facilities for picnicking, fishing, boat launching and other recreational activities (priority would change to first following acquisition of the site)

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
22. Tonawanda Island	Economic Redevelopment	First	Redevelopment of vacant or outdated industrial land and facilities
23. Tonawanda Creek/ NYS Barge Canal	Economic Redevelopment	Second	Improvement of western terminus of Barge Canal in conjunction with redevelopment of entire canal for shipping and barge traffic (would become a first priority when need for shipping is identified-e.g. transshipment of western coal)
	Recreational Development	First	Improvement of public access and recreational opportunities along the Barge Canal
24. Two Mile Creek Corridor	Recreational Development	First	Landscaping and development of a bikeway to connect Sheridan Park with Isle View/NiaWanda Parks
	Preservation	First	Monitoring and improvement of creek water quality (i.e. by low-flow augmentation)
25. Isle View Park	Recreational Development	First	Landscaping and development of recreational facilities (i.e. for boating, fishing and picnicking) in the undeveloped portions of the park
26. Buckhorn Island State Park			No activities beyond continued preservation of fish/wildlife habitat and maintenance of access facilities
27. Beaver Island State Park			No activities beyond continued maintenance of recreation facilities and preservation of natural areas

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
28. Motor Island	Recreational Development	Second	Development of some recreational facilities for boaters (could be through private development and not involve public acquisition)
29. Strawberry Island	Preservation/Restoration	First	Preservation and any restoration activities necessary to protect Strawberry Island and its adjacent littoral areas as a major fish/wildlife habitat area
30. Bethlehem Diked Disposal Area	Economic Development	Second	Development of an adjacent offshore diked area necessary for slag disposal
31. Seneca Shoals	Preservation	First	Regulation and enforcement to prevent activities such as commercial fishing and resource extraction from disrupting the shoals as a fish spawning/habitat area
32. Woodlawn Beach	Preservation	First	Public acquisition of site to ensure its continuation as an open space area
	Restoration	First	Improvement activities including clean-up and landscaping necessary to restore natural site features
	Recreational Development	Second	Development of facilities for swimming, boat launching, and nature study
33. Eighteenmile Creek Gorge	Preservation	First	Protection activities (i. e. municipal ordinances and negative easements to preserve the natural features of Eighteenmile Creek Gorge including its fossil deposits, fish habitat and natural vegetation

TABLE 1 - PRESERVATION/RESTORATION/DEVELOPMENT ACTIVITIES

GAPC	ACTIVITY TYPE	PRIORITY	GENERAL DESCRIPTION OF ACTIVITY
34. Sturgeon Point	Preservation	First	Acquisition or other public measures to insure that the site is available for recreational activities
35. Wendt Beach	Recreational Development	First	Development of facilities to expand opportunities for boating
36. Big Sister Creek and Little Sister Creek			No activities beyond continuation and maintenance of present recreational facilities
37. Evangola State Park			No activities beyond continued preservation of public and semi-public open space areas subject to flooding
38. Coastal Waters of Lakes Erie and Ontario and Niagara River	Preservation	First	No activities beyond continuation and maintenance of present recreational facilities
	Recreational Development/Economic Development	First	Enforcement of water quality standards that will preserve and protect the quality of coastal waters (particularly as a source of drinking water)
	Economic Development	First	Investigate the alternatives of improving the commercial and sport fishery
	Economic Development	First	Improve opportunities for water-oriented activities that will increase the potential for tourism
	Economic Development	First	Investigate the feasibility of utilizing natural resources under coastal waters (feasibility would be tied with goal of preserving coastal water quality)

Also incorporated into the mapping process were geographic areas of particular concern, areas for preservation or restoration, and regional facilities. The latter facilities (i. e. regional facilities) are described in the section prepared for Task 8.10 of the second year Erie and Niagara Counties CZM work program.

It should be noted that the maps prepared for this task only considered resource areas and related factors which extended two miles inland from Lakes Erie and Ontario as well as the Niagara River. This permitted a workable framework to collect data and plot resource locations on the appropriate map. It was also assumed by ENCRPB staff that a two mile mapping limit would include all land/water uses within the bi-county region which exhibit a direct and significant impact on coastal waters. The federal CZM legislation indicates that such uses must be included in the final coastal zone boundary.

In order to clearly illustrate elements listed in the preceding paragraphs, it was necessary to use five maps. The following section discusses each map by identifying the appropriate scale used, elements mapped (e. g. historic sites), and the data source for each element.

1. MAP #1 GENERALIZED EXISTING LAND USE

a. Scale - This includes a series of 23 mylar overlays to the New York State Department of State CZM base maps at a scale of 1" = 2000' (i. e. 1:24,000).

b. Content and Data Source - Map #1 illustrates the generalized existing land use within Erie and Niagara Counties coastal area. The information was obtained from the ENCRPB Areawide Wastewater Management Existing Land Use Inventory (Sept. 20, 1976). It should be noted that the following land uses are included on the Map #1 series:

- (1) high/medium density residential
- (2) low density residential
- (3) commercial
- (4) public and semi-public
- (5) heavy industry
- (6) light industry
- (7) forested bushlands

- (8) outdoor recreation
- (9) vacant
- (10) agricultural-orchards and vineyards,
- (11) agricultural croplands
- (12) agricultural pastureland
- (13) agricultural-other
- (14) water
- (15) wetlands
- (16) transportation

2. MAP #2 SENSITIVE NATURAL FEATURES HISTORIC/ARCHEOLOGIC SITES, AND PUBLIC SEWER SERVICE AREAS

a. Scale - The information is plotted on a 1" = 1 mile Erie and Niagara Counties regional base map.

b. Content and Data Source - The following paragraphs outline the elements plotted on Map #2 and their corresponding data source. It should be noted that wetlands are considered a sensitive natural feature within the Erie and Niagara Counties coastal zone program. However, the wetland mapping is included on Map #1 (i. e. Generalized Land Use).

- (1) Critical Erosion Areas - The critical erosion areas are site specific and were determined from discussions with municipal officials, Corps of Engineers, Sea Grant and ENCRPB staff.
- (2) Beaches - The data sources used to map beach areas included discussions with municipal officials in the Town of Evans, Erie County, ENCRPB Adopted Recreation and Open Space Plan and Program and 1974-75 aerial photographs supplied by ENCRPB Areawide Wastewater Management Treatment Study (208) staff.
- (3) Significant Fish/Wildlife Habitat Areas - The habitat locations were provided by the New York State Department of Environmental Conservation on a series of NYS Department of State CZM base maps (1" = 2000'). Such information was transferred to the bi-county 1" = 1 mile map for use in Task 7.3 of the second year Erie and Niagara Counties CZM program.

- (4) Unique Geological Formations - The major data sources used to plot unique geological formations were ENCRPB staff knowledge and information obtained at numerous CZM public meetings. Such areas include Niagara Falls, Niagara River Gorge, Niagara Escarpment and Eighteen-mile Creek Gorge (Erie County).
- (5) Public Sewer Service Area - Such information included existing areas as well as those areas where public sewer facilities are under construction. The information plotted was obtained from the ENCRPB Sanitary Sewer System map (1" - 2 miles) prepared in 1976 and discussions with ENCRPB Engineering Division staff.
- (6) Historic/Archeologic Sites - The major data sources used to determine historic/archeologic sites were ENCRPB first year CZM resource maps, National Register of Historic Places, Lake Erie Work Group sessions, and a meeting with local historians from the Towns of Lewiston and Porter and the Village of Lewiston. The latter meeting was held on May 31, 1977, in the Lewiston Village Hall.

A brief description of the sites mapped are provided in the following paragraphs. It should be noted that preceding each site is the map legend figure (e.g. H-3) used on Map #2 ("Sensitive Natural Features, Historic/Archeologic Sites, and Public Sewer Service Areas") to identify the historic areas.

- (a) H-1, Four Mile Creek State Park-Town of Porter, Site of British cannon landing in 1759.
- (b) H-2, Fort Niagara State Park-Town of Porter, site of historic fort and French castle
- (c) H-3, Salt Battery-Village of Youngstown, battery constructed during War of 1812 which was hastily overrun by British
- (d) H-4, Fox Point Battery-Village of Youngstown, site of battery constructed during War of 1812
- (e) H-5, Battle of LaBelle Famille-Village of Youngstown, Site of 1759 battle between French and British. The defeat marked the beginning of the decline of French influence in North America.
- (f) H-6, Hopkins Farm-Town of Lewiston, site of Hopkins Farm on the present Joseph Davis State Park. Hopkins was a loyalist during the American Revolution and was granted amnesty after the War.

- (g) H-7, Clarks Point Cemetery-Town of Lewiston, site of old cemetery used as a staging area for Canadian patriots in 1837 during the McKenzie Rebellion
- (h) H-8, Amos Tryon House-Town of Lewiston, Home of famous slave hider and whiskey storage area in the early 19th Century
- (i) H-9, Barton Hill - Village of Lewiston, site of artillery battery under General Winfield Scott in the Battle of Queenston in 1813. Also site of Barton Mansion constructed in 1815 by Major Benjamin Barton.
- (j) H-10, Archeological Site-Village of Lewiston, site located at north end of Water Street, has possible Mastodon or Mammoth remains
- (k) H-11, Indian Burial Mound -Town of Lewiston, located on the Lewiston Art Park site
- (l) H-12, Portage Landing Site-Town of Lewiston, site of portage for Niagara Falls
- (m) H-13, Tramway Site - Town of Lewiston, Site of tramway build by John Montessoro, a British engineer in 1763. This is often referred to as the country's first railroad.
- (n) H-14, Frontier House-Village of Lewiston, old tavern presently being remodeled. The structure was originally built in 1824.
- (o) H-15, Devils Hole State Park-Town of Lewiston, site of English wagon train massacred by 500 Seneca Indians in 1763.
- (p) H-16, DeVeaux School-City of Niagara Falls, oldest operating school in Niagara County. Originally it was a military school and is now functioning as a school for children with learning disabilities.
- (q) H-17, U.S. Customs House-City of Niagara Falls, the former customs building that at one time was considered second in importance to New York City as a point of entry to the U.S.
- (r) H-18, Niagara Falls Public Library-City of Niagara Falls, constructed with funds donated by Andrew Carnegie, the building is noted for its architectural beauty with stained skylights, marble steps, and decorated walls.
- (s) H-19, Niagara Reservation State Park-City of Niagara Falls, created in 1885 to eliminate eyesores of the Niagara Falls Cataract-was first use of a state's power of eminent domain to acquire land for aesthetic purposes.

- (t) H-20, Shredded Wheat Office Building and Factory-City of Niagara Falls, last remaining building of the home of the Shredded Wheat Company in Niagara Falls
- (u) H-21, Whitney Mansion-City of Niagara Falls, home of the son of the founder of the City of Niagara Falls. The mansion has remained unaltered for 100 years.
- (v) H-22, Erie Barge Canal-Town of Tonawanda and City of Tonawanda, area of the old Erie Canal bed
- (w) H-23, Site of Neuter Indian Camp-Town of Hamburg, site of Neuter Indian Camp at the mouth of 18 Mile Creek

3. MAP #3 PRIME AGRICULTURAL AND SCENIC/AESTHETIC AREAS

a. Scale - The information is plotted on a 1" = 1 mile Erie and Niagara Counties regional base map.

b. Content and Data Source - The following paragraphs outline the elements plotted on Map #3 and their corresponding data source.

- (1) Agricultural Districts - Such information was obtained from the ENCRPB Agricultural Districts Map as revised in 1976 and the ENCRPB first year CZM Resources Maps. The following identifies the agricultural districts plotted and the corresponding map symbol (number).
 - (a) Map symbol 1: Wilson Agricultural District (two locations)
 - (b) Map symbol 2: Newfane and Hartland Agricultural District (two locations)
 - (c) Map symbol 3: Somerset Agricultural District (two locations)
 - (d) Map symbol 13: Brant-Evans Agricultural District
- (2) Farming Areas with High Economic Viability - These areas were obtained from a report completed by the New York State Office of Planning Coordination in 1969 entitled The Nature and Distribution of Farming in New York State. The information was contained in a map entitled "Economic Viability of Farm Areas" that was based on data from the New York State College of Agricultural at Cornell University. In order to provide a measure of updating for this map, the information was correlated with the Existing Land Use Inventory map compiled by the ENCRPB 208 staff. Those areas of high economic viability developed for other uses which would preclude farming (i. e. non-agricultural development and parks) were eliminated.

- (3) Farming Areas with Medium Economic Viability - These areas were obtained from the same above noted source and were correlated with the Existing Land Use Inventory map to eliminate areas in non-agricultural development.
- (4) Scenic Vistas - Such vistas include stationary sites (e.g. bluffs, overlooks) for viewing significant natural resources throughout the Erie and Niagara Counties region. The major data sources were ENCRPB on-site inspection, as well as discussions with local officials and regional citizens at CZM public meetings. Scenic vistas in Niagara County are located at Fort Niagara State Park, Town of Porter; Niagara Escarpment, Town of Lewiston; Whirlpool State Park, City of Niagara Falls; Niagara Reservation State Park, City of Niagara Falls. Scenic vistas in Erie County are located along the West River Parkway, Town of Grand Island; Locksley Park, Town of Hamburg; Pinehurst, Town of Hamburg.
- (5) Scenic/Aesthetic Areas - The main difference between scenic vistas and scenic/aesthetic areas pertain to the viewing location. Vistas are stationary sites which permit a single panoramic view from a given point. The scenic/aesthetic areas generally are linear corridors characterized by unique views and scenic resources. The latter areas were plotted through ENCRPB staff on-site inspection as well as CZM public meeting input.

The scenic/aesthetic areas identified in Niagara County include a small section of New York State Rt. 18 along Lake Ontario east of Olcott Harbor (Town of Newfane); a section of New York State Rt. 18 along Lake Ontario in the Town of Wilson; the Niagara River Gorge corridor in the Villages of Youngstown and Lewiston, the Towns of Lewiston and Porter and the City of Niagara Falls. The corridor follows Niagara County Route 18F and the Robert Moses Parkway.

The scenic/aesthetic areas identified in Erie County include West River Parkway in the Town of Grand Island; a portion of River Road in the City of Tonawanda and the Town of Tonawanda; and Eighteenmile Creek gorge.

4. MAP #4 REGIONAL FACILITIES, PROBLEM AREAS, DRAINAGE BASIN AREAS, AND PUBLIC WATER SERVICE AREAS

a. Scale - The information is plotted on a 1" = 1 mile Erie and Niagara Counties regional base map.

b. Content and Data Source - The following paragraphs outline the elements plotted on Map #4 and their corresponding data source.

(1) Regional Facilities - The major data source used for mapping this element was the Task 8.10 section titled Regional Facilities. The latter section was prepared as part of the second year ENCRPB bi-county CZM work program. It should be noted that existing, proposed, and linear facilities are mapped with different symbols. The following describes the symbol and identifies the map reference number for the regional facilities.

(a) Existing Regional Facility - A reference number enclosed by a square is used to identify existing regional facility sites. The reference number and corresponding facility are recognized below:

- 1 Fourmile Creek State Park (Town of Porter, Niagara County)
- 2 Fort Niagara State Park (Town of Porter, Niagara County)
- 3 Lewiston Art Park (Town of Lewiston, Niagara County)
- 4 Power Authority-State Of New York (PASNY Facilities) (City of Niagara Falls and Town of Lewiston, Niagara County)
- 5 Lewiston-Queenston Bridge (Town of Lewiston, Niagara County)
- 6 Whirlpool State Park (City of Niagara Falls, Niagara County)
- 7 Suspension Bridge and Whirlpool Bridge (City of Niagara Falls, Niagara County)
- 8 Rainbow Bridge (City of Niagara Falls, Niagara County)
- 9 Niagara Reservation State Park (City of Niagara Falls, Niagara County)
- 10 Niagara Falls Sewage Treatment Plant (Niagara County)

11. Niagara Falls Water Treatment Plant
(Niagara County)
12. Niagara County Water District #1 Water
Treatment Plant (Town of Wheatfield,
Niagara County)
13. Niagara County Sewer District #1 Sewage
Treatment Plant (Town of Wheatfield,
Niagara County)
14. Town of Tonawanda Sewage Treatment Plant
Erie County)
15. Erie County Water Authority-Jerome P.
Van DeWater Water Treatment Plant (Town of
Tonawanda, Erie County)
16. Niagara Mohawk-Electric Generating Plant
(Town of Tonawanda, Erie County)
17. Town of Tonawanda Water Treatment Plant
(Erie County)
18. Beaver Island State Park (Town of Grand Island,
Erie County)
19. Southtowns Sewage Treatment Plant (Town of
Hamburg, Erie County)
20. Erie County Water Authority (ECWA) - Water
Treatment Plant at Woodlawn (Town of Hamburg,
Erie County)
21. ECWA Water Treatment Plant at Sturgeon Point
(Town of Evans, Erie County)
22. Grand Island Bridges

(b) Proposed Regional Facilities - A reference number enclosed by a circle is used to identify proposed regional facility sites. The following recognizes the reference number and corresponding facility:

- 1 New York State Electric and Gas-Generating
Plant (Town of Somerset, Niagara County)
- 2 Amtrack Passenger Facility (City of Niagara
Falls, Niagara County)

(c) Linear Regional Facilities - A continuous diamond pattern with a intervening reference number is used to identify existing linear regional facilities. The following recognizes the reference number and corresponding facility:

- 1 Niagara Thruway (Town of Tonawanda, Erie
County)

2. Robert Moses Parkway (City of Niagara Falls, Town of Lewiston, Niagara County)
3. Conrail Railroad Corridor (City of North Tonawanda, Town of Wheatfield, Niagara County)
4. Conrail Railroad Corridor (City of Niagara Falls, Town of Lewiston, Niagara County)
5. Portion of the New York State Barge Canal (City of North Tonawanda, Niagara County and City of Tonawanda, Erie County)

- (2) Problem Areas - This includes both "unique problem areas" and "problem areas demanding immediate attention" listed under Task 7.3 mapping requirements. A staff determination was made relative to the specific areas to be mapped under this element. Such decisions were based on data collected in the ENCRPB first and second year CZM work program and numerous coastal zone public meetings. The following identifies the areas and includes a brief summary of the existing problems.
- (a) Olcott Harbor (Town of Newfane, Niagara County) - The major problems include the need for commercial waterfront revitalization, development of an improved small boat harbor of refuge and a resolution of the blighted second home development situation. This area has been identified as a GAPC.
 - (b) Chemtrol (Town of Porter, Niagara County) - Chemtrol is a toxic waste processing and disposal area. It is located over substrata known to have leached borates into the groundwater which may cause future contamination of the Lower Niagara River and Lake Ontario. Chemtrol has been identified as a GAPC.
 - (c) Love Road Canal/Griffon Park Extension (City of Niagara Falls, Niagara County) - The area is a former toxic waste disposal site used by Hooker Chemical and Plastics Company. The area has begun to leach chemicals into surrounding homes and storm sewers. This has suspended parkland acquisition efforts by the City of Niagara Falls until the leachate has been stabilized. This area has been identified as a GAPC.
 - (d) Strawberry Island (Town of Tonawanda, Erie County) - The area is suffering from severe erosion problems which threatens the future existence of the Island. It should be noted that Strawberry Island has been identified as a GAPC and a land/water use conflict area (See Task

7.4 Section, ENCRPB Second Year CZM
Work Program, June, 1977)

- (e) Hoover Beach (Town of Hamburg, Erie County) - The area is a Lake Erie beachfront community experiencing severe erosion and inundation problems resulting from ice and wave action as well as high lake levels. This area is currently under discussion by the Lake Erie CZM Work Group as a possible GAPC.

- (3) Subdrainage Basin Boundaries - The information plotted was obtained from the ENCRPB Areawide Waste Treatment Management Study (208) maps. The latter indicated the subdrainage basin boundaries in Erie and Niagara Counties using a 1" = 1 mile base map for use in the CZM program.
- (4) Public Water Service Area - The information plotted was obtained from the ENCRPB Adopted Water Supply Plan and Program (1974) as well as ENCRPB Engineering Division staff comments. The coastal portion of the entire two county region (excluding the City of Buffalo and Cattaraugus Indian Reservation) is considered to have public water service).

5. MAP #5 PROPOSED GEOGRAPHIC AREAS OF PARTICULAR CONCERN
AND AREAS FOR PRESERVATION/RESTORATION

a. Scale - The information is plotted on a 1" = 1 mile Erie and Niagara Counties regional base map.

b. Content and Data Source - The following paragraphs outline the elements plotted on Map #5 and their corresponding data source.

- (1) Proposed Geographic Areas of Particular Concern (GAPC) with No Areas for Preservation/Restoration (APR) - the preceding portions of this section identified several GAPC's throughout Erie and Niagra Counties. In Subsection C of this section, the types of activities proposed for these GAPC's were identified in Table 1. Those GAPC's with no specific preservation or restoration activities are included under this designation.

- (2) . Proposed Geographic Areas of Particular Concern (GAPC) with Areas for Preservation/Restoration (APR) - Included under this designation are those GAPC's that have specific proposed preservation or restoration activities identified in Table 1 of the preceding portion of this report.

E. CONCLUSION

This report has reviewed the methodology used to identify geographic areas of particular concern in the Erie-Niagara region. It should be noted that thirty-eight (38) GAPC's were recognized in Erie and Niagara Counties situated along Lake Ontario, Lower Niagara River, Upper Niagara River, and Lake Erie. In addition to GAPC identification, descriptive summary sheets are included as attachments to this report. Such work summary sheets describe the location, value and problems unique to each GAPC.

Following the above analysis, numerous areas for preservation or restoration (APR) were recognized within various GAPC's. These are identified in Table 1 of this report and provide a good outline of the APR's and their respective priorities relative to similarly designated areas.

The final section of this report outlined the mapping specifications which were used to illustrate numerous coastal zone resources. Such mapping satisfied work elements for the following Erie and Niagara Counties CZM second year work program tasks:

- Task 3.1 - Citizen Committee Program
- Task 3.2 - Outreach and Feedback Program
- Task 7.3 - Geographic Areas of Particular Concern and
Natural Resource Mapping
- Task 8.10 - Regional Facilities

ERIE AND NIAGARA COUNTIES REGIONAL PLANNING BOARD
COASTAL ZONE MANAGEMENT SUBCOMMITTEE

CRITERIA FOR DESIGNATING GEOGRAPHIC AREAS
OF PARTICULAR CONCERN

The Coastal Zone Management Act of 1972 requires that those states developing a coastal zone management program identify geographic areas of particular concern (GAPCs) within the coastal zone. In coordination and cooperation with the CZM Subcommittee and local communities, the ENCRPB will inventory and designate GAPCs within Erie and Niagara Counties.

I SUMMARY OF REQUIREMENTS OF THE COASTAL ZONE MANAGEMENT ACT

Geographic areas of particular concern are those land and water areas in which the state has a special interest, particularly those areas facing pressures which demand the attention of, or exceed the capabilities of, the state's existing planning and regulatory powers. These stresses may range from developmental pressures in a pristine area to the chaotic, competing demands in transitional areas, to public needs for beach access in developed communities. GAPCs are expected to be the primary means by which states form policy for and manage specific areas of the coastal zone.

The regulations indicate that states must consider the list identified in Section II of this handout as criteria for possible GAPC designation. This requirement is not meant to imply that all these areas, or even one from each category must be designated; only that they be given reasoned consideration.

II CRITERIA FOR DESIGNATING GAPCs

The following is a list of eight categories of GAPCs which are to be considered as criteria for possible GAPC designation. It should be noted that following each category or criterion are examples of types of areas which may meet the respective criteria.

1. CRITERION: Areas of Unique, Scarce, Fragile, or Vulnerable Natural Habitat, Physical Features, Historical Significance, Cultural Value and Scenic Importance

a. Types of Areas Which May Meet This Criterion:

- | | |
|------------------|---------------------|
| - Islands | -Coastal formations |
| - Historic Sites | -Rock outcrops |
| - Wetlands | -Scenic vistas |

b. Specific Areas Which May Meet Criterion:

- Niagara Reservation
- Strawberry Island

Criteria for Designating Geographic Areas of Particular Concern

Page 2

2. CRITERION: Areas of High Natural Productivity or Essential Habitat For Living Resources, Including Fish, Wildlife, and the Various Trophic Levels in the Food Web Critical to Their Well-Being

a. Types of Areas Which May Meet This Criterion:

- Bird nesting areas
- Wetlands
- Agricultural districts
- Forest lands
- Fossil fuel areas
- Fish spawning areas

b. Specific Areas Which May Meet This Criterion:

- Tifft Farm
- Newfane and Hartland Agricultural District

3. CRITERION: Areas of Substantial Recreational Value and/or Opportunity

a. Types of Areas Which May Meet This Criterion:

- State Parklands
- Private Campsites
- County/Local Parklands
- Trailways (pedestrian/bicycle)

b. Specific Areas Which May Meet This Criterion:

- Fort Niagara State Park
- Wendt Beach County Park

4. CRITERION: Areas Where Developments and Facilities are Dependent Upon the Utilization of, or Access to Coastal Waters

a. Types of Areas Which May Meet This Criterion:

- Ports
- Marine Research Sites
- Commercial Fishing Facilities
- Sites for electric generating facilities

b. Specific Areas Which May Meet This Criterion:

- New York State Power Authority facilities (Lewiston)
- Olcott Harbor

5. CRITERION: Areas of Unique Geologic or Topographic Significance to Industrial or Commercial Development

a. Types of Areas Which May Meet This Criterion:

- Mineral deposit sites
- Deepwater areas for coastal shipping facilities

b. Specific Areas Which May Meet This Criterion:

- Buffalo Harbor
- Niagara Falls Area

6. CRITERION: Areas of Urban Concentration Where Shoreline Utilization and Water Uses are Highly Competitive

a. Types of Areas Which May Meet This Criterion:

- Large tracts of vacant or underdeveloped urban waterfront land
- Second home development site (beachfront)

b. Specific Areas Which May Meet This Criterion:

- City of Buffalo Waterfront Urban Renewal Site
- Niagara River Shoreline around the former Spencer Wickwire Site (Town of Tonawanda)

7. CRITERION: Areas of Significant Hazard if Developed Due to Natural or Man-Made Forces

a. Types of Areas Which May Meet This Criterion:

- Floodplains
- Areas subject to storms, including severe wave action
- Areas subject to excessive erosion
- Beach dune or marsh areas which absorb the energy from wave action or impede the flow of damaging high waters

b. Specific Areas Which May Meet This Criterion:

- Floodplains at the mouth of Eighteenmile Creek (Town of Hamburg) and Little Sister Creek (Town of Evans)
- Sections of Lake Ontario shoreline

8. CRITERION: Areas Needed to Protect, Maintain or Replenish Coastal Lands or Resources

a. Types of Areas Which May Meet This Criterion:

- Wetlands
- Spoil disposal sites
- Aquifer recharge areas

b. Specific Areas Which May Meet This Criterion:

- Buckhorn State Park
- Keg Creek Wooded Wetlands (Town of Newfane)

III PROCEDURE TO BE USED FOR DESIGNATING GAPC

Steps to be used by the Coastal Zone Management Subcommittee in designating GAPCs are identified below. It should be noted that each CZM Subcommittee Work Group (i. e. Lake Ontario, Lower Niagara River, Upper Niagara River, Lake Erie) should identify possible GAPCs for their particular areas and report back to the full Subcommittee at the November meeting.

- Step 1: Establish criteria for identifying GAPCs. It should be noted that the criteria identified in Section II above must be considered when designating GAPCs. However, work groups can modify these criteria or add new ones based on additional information (e. g. municipal master plan goals, public consensus, etc.).
- Step 2: Review the information contained in the Inventory and Analysis of Coastal Zone Resources document developed by the ENCRFB during the first year coastal zone work program.
- Step 3: Review the Maps of Coastal Zone Resources and Related Factors which apply to the work group area.
- Step 4: Apply the criteria for designating GAPCs to the specific work group area and identify potential GAPCs on the appropriate map of coastal zone resources which were distributed to each group.
- Step 5: Identify the State's interest in designating the area as a GAPC, including a discussion of the problems facing the area and its important or unique values.

/ch
9/30/76

ERIE AND NIAGARA COUNTIES REGIONAL PLANNING BOARD

MEMORANDUM

FROM T. Dearing DATE 3 December 1976
TO J. Rasey
SUBJECT Criteria: Geographic Areas of Particular Concern
FILE

I OVERVIEW: The federal and state regulations for coastal zone management identify four general criteria for determining Geographic Areas of Particular Concern (GAPC). These are outlined in Section II of this memorandum. Such regulations also specify eight GAPC types which would meet one or more of the four general criteria originally identified. The federal regulations request that such types of GAPCs be considered by States participating in the progra. The eight GAPC types and their descriptions can also be considered as criteria when identifying geographic areas of particular concern.

It should be emphasized that the nature of the four general criteria and the eight possible GAPC types (or criteria) are such that the entire coastal zone could be recognized as a geographic area of particular concern. Such strict adherence to the regulatory suggestions is not feasible. By establishing too many GAPCs the concept would lose its sensitivity as an indicator of unusual focus. In addition, future administration of such areas would be cumbersome.

Due to the conflict between the federal/state criteria suggestions for GAPCs and the need to limit the number of such areas, a compromise was reached. This utilized the four general criteria, four selected GAPC types (or criteria) and two staff-determined criteria. This is explained in more detail below. A major drawback in using criteria such as this was the lack of quantitative or performance standards to determine whether a certain area met the criteria. This situation necessitated much subjective judgment on my part when reviewing the areas.

II CRITERIA: The criteria used in identifying GAPCs can be divided into three types. These include a) the four general criteria as indicated in the federal/state regulations, b) four possible GAPC types as identified in the federal regulations and c) two staff-determined criteria.

A. Four General Criteria: The federal/state regulations have outlined the following as criteria to be used in determining GAPCs.

1. Areas of significant natural/scenic value
2. Transitional or intensely developed area
3. Area especially suited for intense development (i. e. Commercial or industrial)
4. Areas requiring immediate attention.

B. Four Possible GAPC Types Which Were Used as Criteria: The state regulations indicate that regional contractors will have primary responsibility for identifying GAPC types which may be suitable for development (as opposed to resource or natural hazard areas). The regulations identify four possible development GAPC types which were subsequently used as criteria. These include the following:

1. Areas of substantial recreational value and/or opportunity.
2. Areas where developments and facilities are dependent upon the utilization of, or access to, coastal waters.
3. Areas of unique geologic or topographic significance to industrial or commercial development.
4. Areas of urban concentration where shoreline utilization and water uses are highly competitive.

C. Staff-Determined Criteria:

1. Public Preference: A particular area would meet this criterion if a specific municipality requested an area be designated a GAPC within its boundary or a vote was taken by a citizens group relative to designating specific areas.
2. Existing Statewide or Federal interest in area: Such interest may be reflected through land ownership (e.g. State Parks) or federal/state projects occurring in the area (e.g. DEC fish stocking programs, Corps projects).

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ATTACHMENT 3

GEOGRAPHIC AREAS OF PARTICULAR CONCERN SUMMARY SHEETS ERIE AND NIAGARA COUNTIES, NEW YORK

The following information contains a summary sheet for each geographic area of particular concern (GAPC) identified during the ENCRPB Second Year Coastal Zone Management (CZM) Work Program. Such information includes boundary delineations, descriptive material and a brief summary of the problems facing the area (if any) as well as the GAPC's value to New York State.

It should be noted that a location map is attached to each summary sheet. These illustrate the approximate GAPC boundaries on New York State Department of Transportation 1:24,000 series planimetric maps. However, the map showing the Seneca Shoals GAPC was a United States Army Corps of Engineers, Lake Erie-Niagara River-Lake Ontario Navigational Map (1:80,000). It should also be noted that a location map showing the water bodies GAPC (i. e. Niagara River, Lake Ontario and Lake Erie) is not included in this attachment.

The maps which define a GAPC boundary adjacent to the Niagara River or Lakes Erie and Ontario indicate the boundary as extending into the water body. The GAPCs bordering the Niagara River generally extend either to the international boundary line, Erie County/Niagara County municipal line within the River or a municipal boundary. Those GAPCs bordering Lakes Erie or Ontario extend one-mile seaward of the mean high water mark. Such boundary determinations recognize the impact various water uses may have on geographic areas of particular concern. Such impacts may involve visual, water quality and other environmental problems. During the third year ENCRPB Coastal Zone Work Program, the GAPC boundaries will be re-evaluated to determine the feasibility of including a large water area. Therefore, the preliminary boundaries identified in this attachment are subject to change during the third year program.

It should also be noted that various geographic areas of particular concern which extend into the water have overlapping boundaries. For example, the Stella Niagara Drift GAPC in the Town of Lewiston and Town of Porter, is located within the Niagara River. The GAPC boundaries overlap with the Joseph Davis State Park GAPC, Lower Niagara River Scenic Residential Coastal Area GAPC, and the Niagara River. The latter has been recognized as a geographic area of particular concern along with Lakes Erie and Ontario. In these situations, it can be assumed that the most strict priority use ranking would apply when administering the Coastal Zone Management Program.

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: GOLDEN HILL STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Golden Hill State Park
- B. Location: Golden Hill State Park is situated on the south shore of Lake Ontario in the Town of Somerset, Niagara County, New York. The Park is 40 miles northeast of Buffalo and approximately 50 miles west of Rochester. The actual GAPC boundaries follow the State Park property lines, but extend one mile seaward of the Lake Ontario high water mark (refer to map).
- C. Type: State Park
- D. General Area Description: The Park was acquired by New York State in 1960 and contains 900 acres of land. The area has not been fully developed and is presently used only by campers and picnickers. The land consists of cleared areas containing several orchards and includes the lower reaches of Golden Hill Creek and a four acre cattail marsh at the creek mouth.

The surrounding area is rural and contains fruit orchards and dairy farms. There is no industrial activity in the area and the commercial uses are limited to the processing of food and dairy products.

The future plans for Golden Hill State Park include boating, picnicking swimming and expanded camping facilities. It is estimated that improvements to the area will accommodate 100,000 bathers, 400 permanently based boats and 3,000 trailer drawn boats per year.

II STATEWIDE INTEREST IN AREA

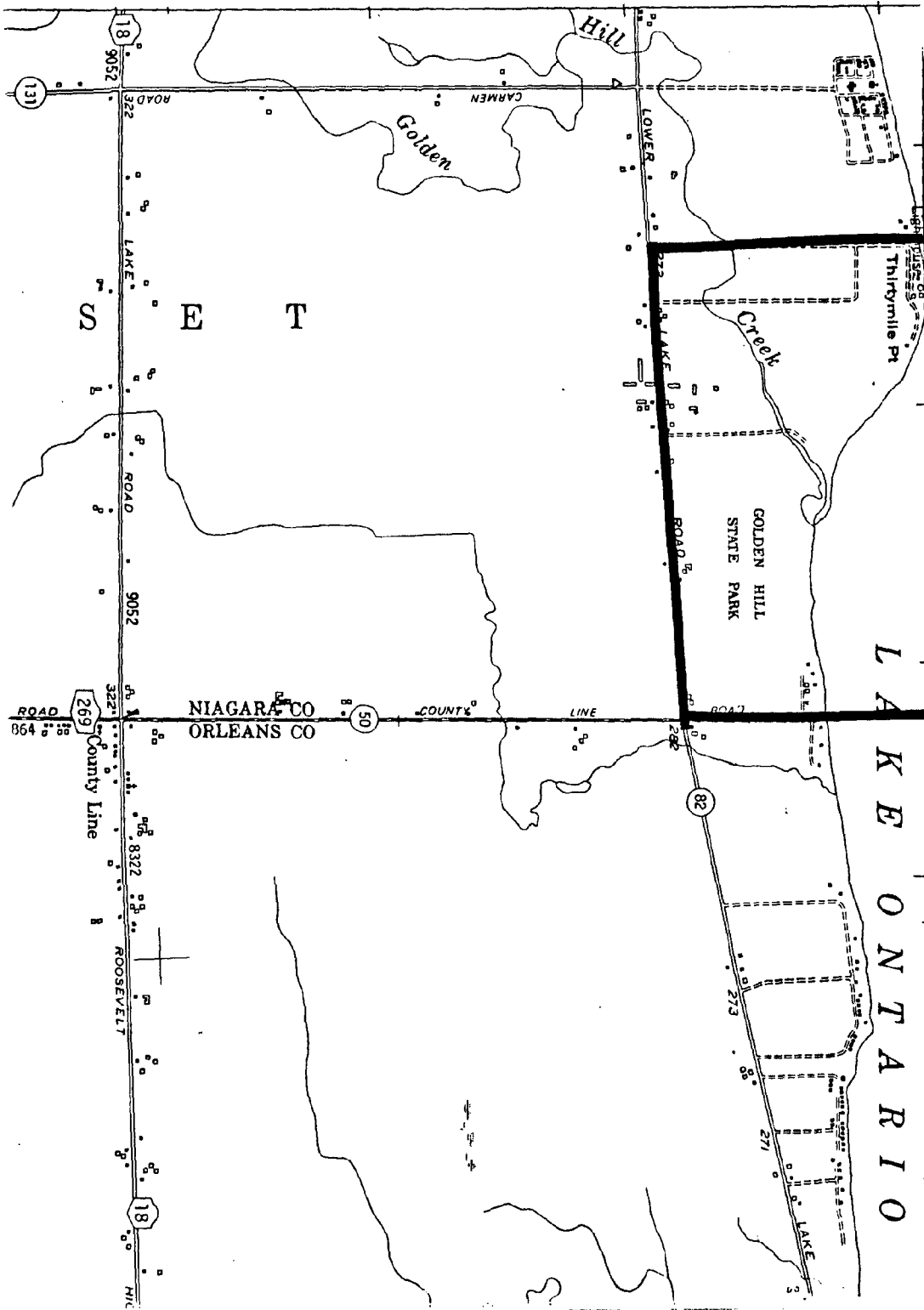
- A. Problems Facing Area
 - 1. Presently, there is no protection from Lake storms for small boats within the Park area. This problem reflects a need for breakwaters and shore protection within the harbor area.
 - 2. The poor Lake Ontario water quality endangers future Lake swimming activity within the Park.

B. Statewide Value

1. New York State has recognized the value of Golden Hill State Park as an open space resource by acquiring the land for multi-recreation use.
2. The area has potential as an attractive recreational boat harbor. In order to reach this potential, a protected harbor entrance and channel improvements would have to be undertaken by the United States Army Corps of Engineers. The need for additional small boat harbors along Lake Ontario will increase as the impact of past and future fish stocking programs by New York State Department of Environmental Conservation create more demands for boating facilities.
3. Golden Hill State Park is located midway between Buffalo and Rochester. These metropolitan centers generate a great number of boating enthusiasts in need of public boating facilities. The Park, in conjunction with the future harbor improvements, will be able to address those needs.
4. The area is located adjacent to the Somerset Agricultural District. New York State has recognized the District as a valuable farm area and has offered tax incentives in order to maintain the District in agricultural use. Future development of Golden Hill State Park may create pressures for intense land development in the Park and adjacent Agricultural District. This increases the importance of Golden Hill State Park as an area of particular concern.

6/29/77

NAME: GOLDEN HILL STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: OLCOTT HARBOR/MARINE COMMERCIAL AREA

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Olcott Harbor/Marine Commercial Area
- B. Location: Olcott Harbor is located on the south shore of Lake Ontario at the mouth of Eighteenmile Creek in the Town of Newfane, Niagara County, New York. It is approximately 18 miles east of the mouth of the Niagara River and 63 miles west of Rochester Harbor.
- The attached map shows the detailed boundaries for the Olcott Harbor GAPC. It should be noted that the boundary extends one mile seaward of the Lake Ontario high water mark.
- C. Type: Marine Commercial/Harbor Area
- D. General Area Description: The hamlet of Olcott is located within the jurisdictional limits of the Town of Newfane, New York. The Harbor has been developed with boat docks and facilities on both sides of Eighteenmile Creek to Main Street in Olcott. Some marine commercial uses are located further south up to the new Route 18 bridge. In addition, numerous seasonal and year round residences are located along Lake Ontario and Eighteenmile Creek within the GAPC limits.

Olcott Harbor is one of the few harbors in western New York capable of handling craft with drafts more than six feet. The United States Army Corps of Engineers has undertaken harbor improvement projects at Olcott over the past year. These included parallel pier construction extending 850 feet seaward of the Creek mouth and channel dredging within the Harbor. The Corps has also conducted a feasibility study concerning harbor improvements at Olcott.

The economy of Olcott is highly dependent upon the marine commercial activities within the Hamlet. In addition to boating and fishing attractions at Olcott, numerous picnickers and other recreation activists utilize Krull Park. This is a 329 acre Niagara County Park located adjacent to Olcott.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area

1. The potential for Olcott Harbor as a safe port is currently limited. This is due to the inadequate protection afforded by the existing Harbor structures. In addition, the Harbor has limited deep water mooring space for large craft.
2. Olcott Harbor contains limited marine-commercial facilities (e.g. marinas, restaurants) to handle increased fishing and boating activity within the Harbor. Such facilities should expand as fishing increases and more boaters come to the area.
3. Numerous seasonal homes have been converted into permanent residences. This has caused serious blight problems and will necessitate a complete redevelopment effort within the hamlet.
4. Eighteenmile Creek provides an excellent salmonid run and northern pike spawning area.

B. Statewide Value

1. Olcott Harbor is one of the few harbors in Western New York capable of handling recreational craft with drafts more than six feet.
2. The proposed Corps of Engineers harbor improvement project will provide a safe small boat harbor of refuge for recreational vessels in Lake Ontario. This would be one of few such areas along the Lake shoreline.
3. The past and future fish stocking program conducted by the New York State Department of Environmental Conservation within Lake Ontario will increase the fishing and boating activity in Olcott. This will increase the demand for boating and fishing facilities along the Lake. Olcott Harbor has a great potential to accommodate the increased demand.
4. Eighteenmile Creek provides an excellent salmonid run and northern pike spawning area.

6/29/77

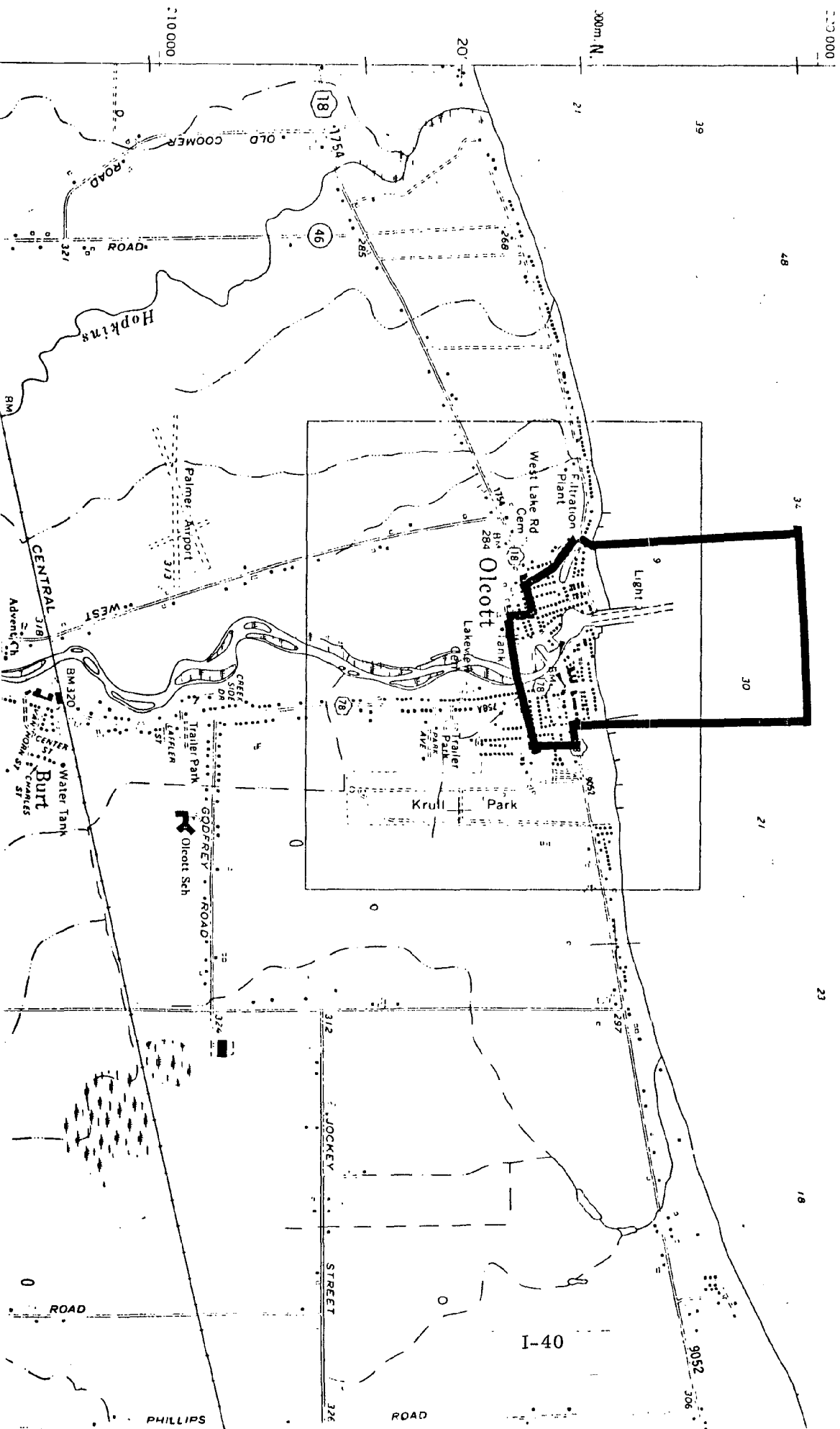
NAME: OLCOTT HARBOR

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COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: WILSON HARBOR-TUSCARORA BAY

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Wilson Harbor-Tuscarora Bay
- B. Location: The Wilson Harbor-Tuscarora Bay area lies 12 miles east of the mouth of the Niagara River and 6 miles west of Olcott Harbor. Reference should be made to the attached map for a detailed site location. It should be noted that the west boundary is a shared boundary with the Wilson-Tuscarora State Park GAPC east border.
- C. Type: Wetland/Small Boat Harbor
- D. General Area Description: The East Branch of Twelve Mile Creek flows through a shallow embayment before entering Lake Ontario. This embayment is identified as Tuscarora Bay and is approximately 4,000 feet long and 300 feet wide. The Tuscarora Bay/Wilson Harbor area is an ideal setting for a small boat harbor. The Bay is well sheltered and provides good protection from storms in all directions. The United States Army Corps of Engineers has recognized this asset and has undertaken numerous harbor improvement projects within the area. Surrounding the Bay are three land areas identified as the Sunset Peninsula, the Bay Shore, and Wilson-Tuscarora State Park. The latter is not included with the GAPC boundary.

The Sunset Bay peninsula includes numerous second home cottages and some year round residences. It is located on the north shore of the bay. The Bay Shore area is located on the south shore of the Bay and on the east side of Twelve Mile Creek. This area contains recreational facilities and commercial marinas. Much of the Bay Shore lies within a wetland and includes some wooded land as well.

New York State has acquired about 260 acres of land surrounding the western end of Tuscarora Bay. Future facilities for the Park include boat launching ramps, public dock, and bathing beach area.

The Tuscarora Bay area is an important recreational and economic resource for the Town and Village of Wilson, as well as Niagara County. The Sunset Peninsula contains numerous second home residences which aid the tourist industry during the summer months. In addition, the area provides a valuable fishing haven and small boat harbor for many State residents.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area - There are no major problems currently present at the GAPC site.

B. Statewide Value

1. The Bay area provides one of the few small boat harbors on Lake Ontario. It provides safe harborage docking and launching facilities for many small boats travelling the Lake.
2. It is an area of unique scenic importance. The land adjacent to the Bay and Lake Ontario offers exceptional views of the nautical activities within the Bay area. Such views are increased due to the sloping character of the land adjacent to the water bodies. This offers an elevated vista of the boating and recreational activities.
3. The area contains a large wetland and wooded area which both function as important coastal resources.
4. The area is located adjacent to the Wilson-Tuscarora State Park. It is important to protect the Park from adverse environmental impacts which may occur from land uses adjacent to Park boundaries. In addition, the Bay area contains valuable natural resources which need protection from increased development. The latter may occur due to the eventual development of Wilson-Tuscarora State Park.
5. The success of Wilson Tuscarora State Park is dependent on the viability of the adjoining Tuscarora Bay area as a small boat harbor.
6. United State Army Corps of Engineers has recognized the Tuscarora Bay/Wilson Harbor area as a valuable small boat harbor. The Corps has constructed entrance channel piers and dredged portions of the Bay for small boat craft. It will continue to maintain these facilities in the future.
7. The New York State Department of Environmental Conservation has conducted a fish stocking program within the East Branch of Twelve Mile Creek. It can be assumed that such stocking will continue as soon as the mirex problem is alleviated. Therefore, it is important to protect this area as a valuable fish habitat and for recreational fishing enjoyment.

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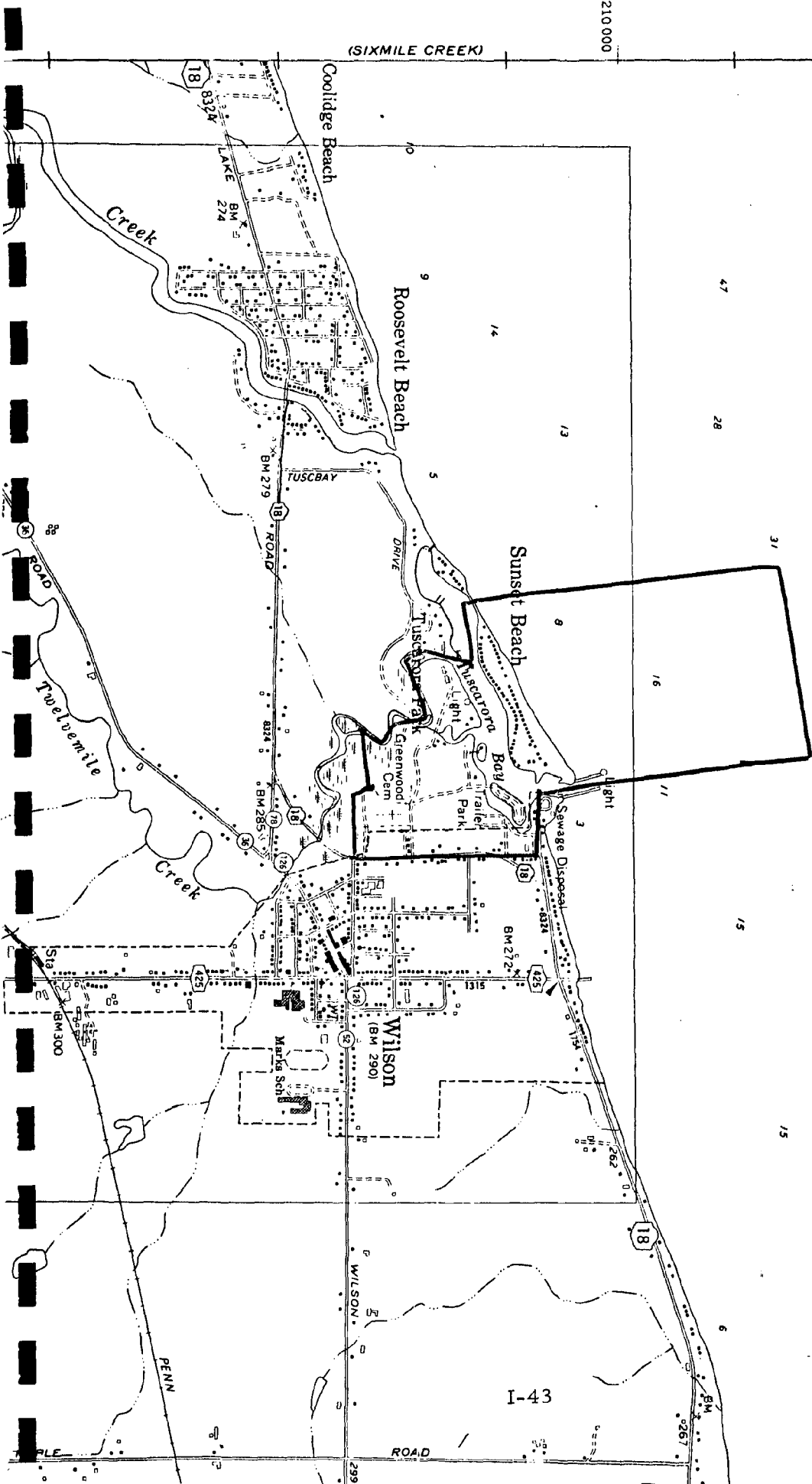
(SIXMILE CREEK)

NAME: WILSON HARBOR-TUSCARORA BAY
6/29/77

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COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: WILSON-TUSCARORA STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Wilson-Tuscarora State Park
- B. Location: The Wilson-Tuscarora State Park is located within the Town of Wilson, Niagara County, New York, municipal boundaries and is situated on the south shore of Lake Ontario. It is approximately 11 miles east of the Niagara River mouth and 7 miles west of Olcott Harbor. The actual GAPC boundaries follow the State Park boundary lines, but extend one mile seaward of the Lake Ontario high water mark. It should be noted that the east boundary is a shared boundary with the Wilson Harbor GAPC west border.
- C. Type: State Park/Flood Plain
- D. General Area Description: The Park is maintained by the Niagara Frontier State Parks and Recreation Commission, and encompasses 390 acres. Currently, the Park is undeveloped with limited fishing facilities. However, future plans include picnicking, boating and other active recreation uses. The Park is bordered by the East and West branches of Twelve Mile Creek, as well as Lake Ontario and Tuscarora Bay. The latter is approximately 4,000 feet long and 30 feet wide. It provides an ideal small boat harbor and is important to the future success of Wilson-Tuscarora State Park.

Land use surrounding the Park includes rural areas as well as low density residential districts within the Village of Wilson, Roosevelt Beach and the Sunset Peninsula. Many of these areas have been identified as second home developments.

II STATEWIDE INTEREST IN AREA

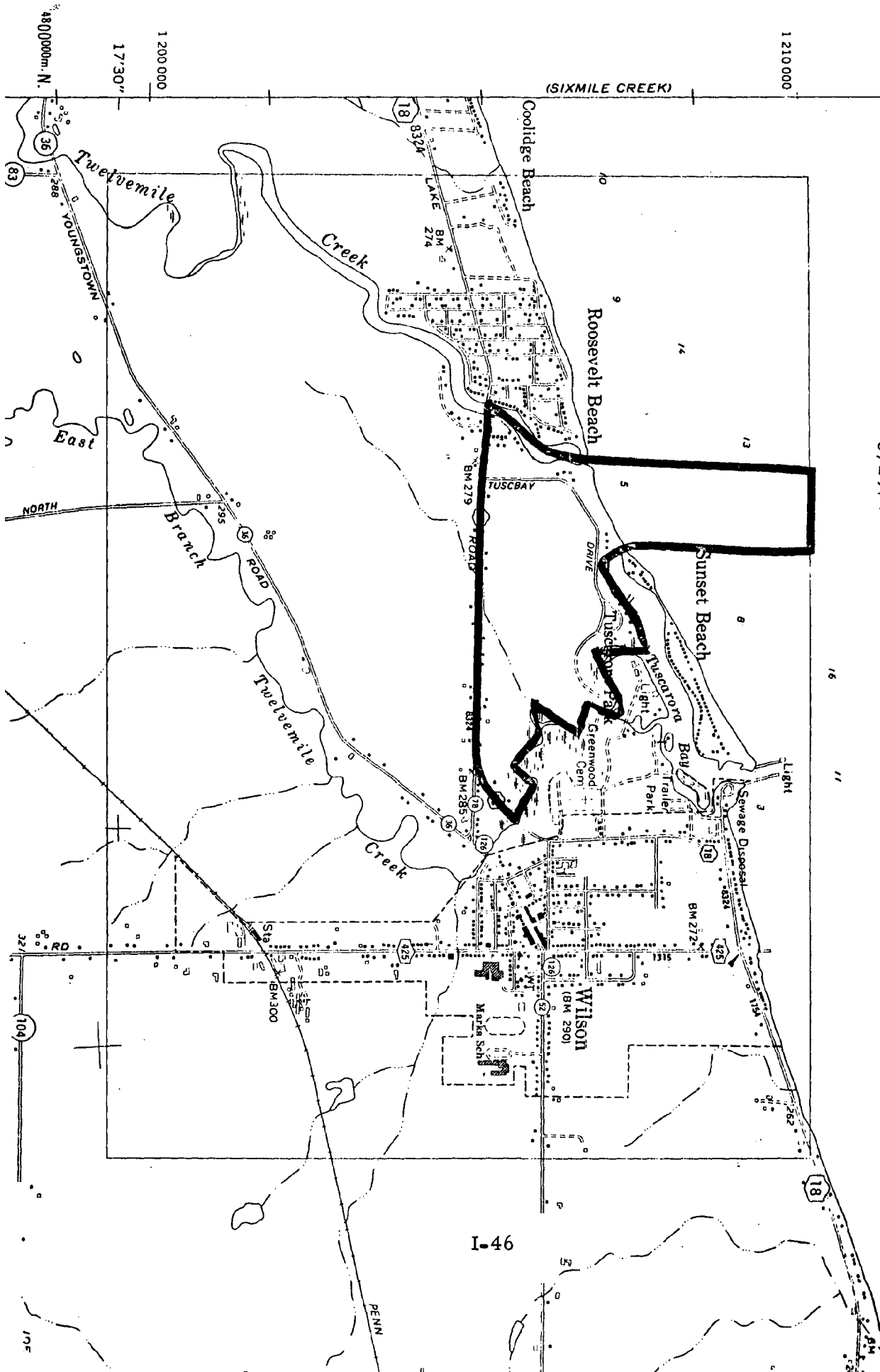
- A. Problems Facing Area - There are no major problems currently present at the GAPC site.
- B. Statewide Value -
 - 1. New York State Has recognized the value of Wilson-Tuscarora State Park as an open space resource by acquiring the land for multi-recreational use.

CZM-GAPC-Wilson-Tuscarora State Park
Page two

2. It is an area of unique scenic importance. The GAPC is bounded by Lake Ontario, Tuscarora Bay, and the East Branch of Twelve Mile Creek. In addition, portions of the West Branch of Twelve Mile Creek are within the GAPC. Such water areas and the nautical activity within Tuscarora Bay provide valuable scenic opportunities.
3. The New York State Department of Environmental Conservation has conducted a fish stocking program within the East Branch of Twelve Mile Creek. It can be assumed that such stocking will continue as soon as the mirex problem is alleviated. Therefore, it is important to protect this area as a valuable fish habitat.
4. The Park is situated adjacent to the Tuscarora Bay small boat harbor. This is one of the few good harbors along the Lake and will increase in importance as boating demands are amplified. This should occur during the fishing season. Therefore, the future park boating facilities will be needed to address the increased demand for public boat launch areas and marina structures adjacent to the Bay.

6/29/77

NAME: WILSON-TUSCARORA STATE PARK
286/29/77



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COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: FOURMILE CREEK STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

A. Name: Fourmile Creek State Park

B. Location: The Park is located on the south shore of Lake Ontario approximately four miles east of the Niagara River mouth. The actual GAPC boundaries follow the present Park property lines but extend one mile seaward of the Lake Ontario high water mark (refer to map). The GAPC is within the municipal boundary of the Town of Porter, Niagara County, New York.

C. Type: State Park

D. General Area Description: Fourmile Creek State Park includes 248 acres and a 3,600 foot lake frontage. The lower reach of Fourmile Creek flows through the Park and into Lake Ontario. However, the creek mouth cannot be used as a small boat harbor due to a gravel bar which often closes the creek from the main water body. There is no navigation in the creek at the present time, and future use is dependent on creek channel improvements. This would provide the necessary access to Lake Ontario. A 50 foot wide gravel beach extends across the beach frontage during low lake levels. At average or high lake levels, however, the beach is inadequate for recreation use.

Land use surrounding the Park includes low density residential and agricultural uses. The area is scenic and very close to the Villages of Youngstown and Lewiston as well as the City of Niagara Falls.

Presently, the Park is used as a camping area and includes 266 camp sites. Future plans include camp ground expansion, marine facility development and recreational support facilities (i. e. sewage treatment structures, maintenance garage).

II STATEWIDE INTEREST IN AREA

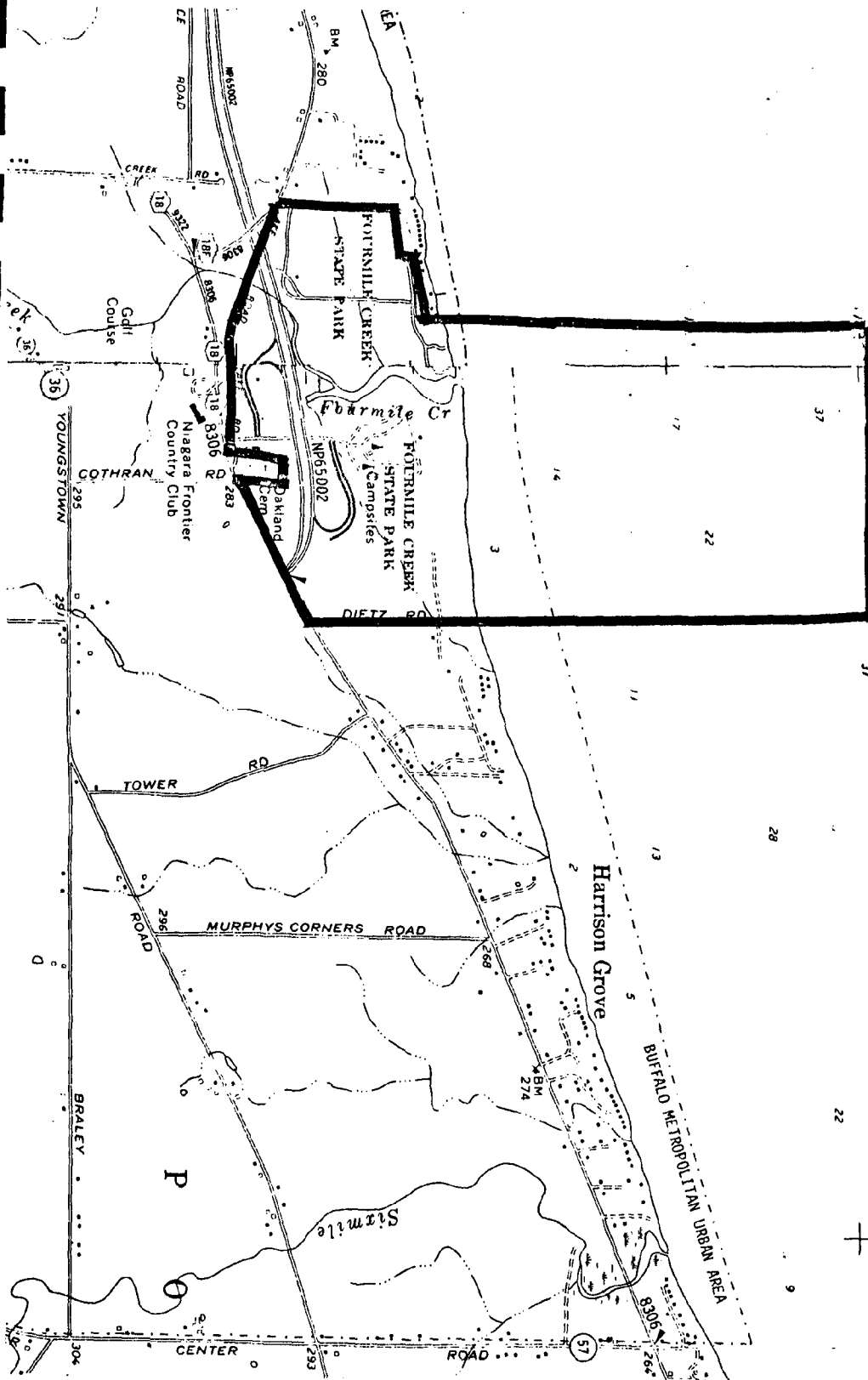
A. Problems Facing Area: There are no major problems currently present at the GAPC site.

B. Statewide Value

1. New York State has recongized the value of Fourmile Creek State Park as an open space resource by acquiring the land for multi-recreation use.
2. The park provides accessible public camping facilities for tourists visiting Niagara Falls and other State Parks along the Niagara River. Presently, there is a lack of public camp grounds in the Niagara Falls area.
3. The site is ideal as a scenic recreation resource and has great potential for boating and fishing activities. Improvements to the creek mouth and beach area will increase the park's value as a multi-recreational facility. It should be noted that a preliminary study conducted by the United States Army Corps of Engineers indicated that recreation boat harbor and bathing beach improvements are economically feasible at Fourmile Creek State Park.

6/29/77

NAME: FOURMILE CREEK STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: FORT NIAGARA STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Fort Niagara State Park
- B. Location: The park is located at the mouth of the Niagara River with Lake Ontario. It is within the municipal boundaries of the Town of Porter, Niagara County, New York. The actual GAPC boundaries are the state park property lines. However, the north boundary line extends one mile seaward of the Lake Ontario high water mark, while the west boundary extends to the International boundary line within the Niagara River (refer to map).
- C. Type: State Park
- D. General Area Description: It should be noted that the park is under the jurisdiction of the Niagara Frontier State Parks Commission. In addition to the fort, other public facilities on the site include picnic areas, bathing facilities, souvenir shop and a U.S. Coast Guard base. The park is located at the northern terminus of the Robert Moses Parkway and is immediately accessible to the Buffalo and Niagara Falls area. It contains 284 acres and supports the original stone structure which guarded the confluence of the river with Lake Ontario. The grounds are well maintained and offer unique scenic vistas of the calm and gentle waters of the Niagara River as it flows into Lake Ontario.

II STATEWIDE INTEREST IN AREA

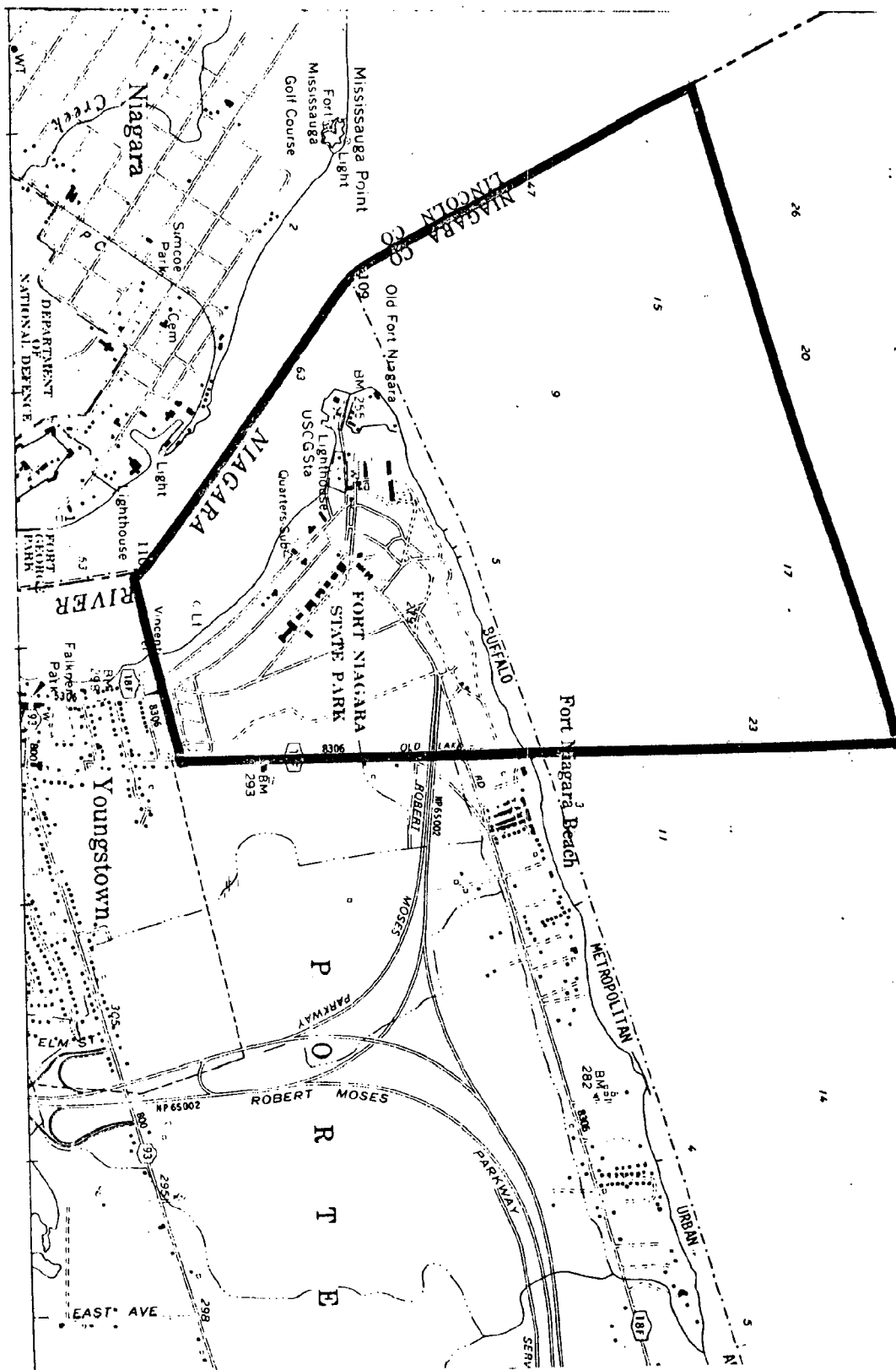
- A. Problems Facing Area
 - 1. The Robert Moses Parkway is the main transportation route to the State Park. This thoroughfare is situated a few miles inland from the Niagara River and extends through rural areas. Thus, tourists traveling to Fort Niagara bypass the historic and commercial attractions located in the Villages of Lewiston and Youngstown.
 - 2. The shoreline adjacent to the state park is characterized by erodible soil areas.

B. Statewide Value

1. New York State has recongized the value of Fort Niagara as an open space resource by acquiring the land for multi-recreational use.
2. Old Fort Niagara is listed in the National Register of Historic Places. Therefore, the site serves as both an educational and historic attraction. The actual structure is a stone fort, with cannons, drawbridge, outbuildings and parade grounds. The original structure was built in 1726 and served as a major guardian of great lakes trade routes in the 1700's.
3. The area provides a unique scenic vista at the confluence of the Niagara River with Lake Ontario.

6/29/77

NAME: FORT NIAGARA STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: YOUNGSTOWN HARBOR

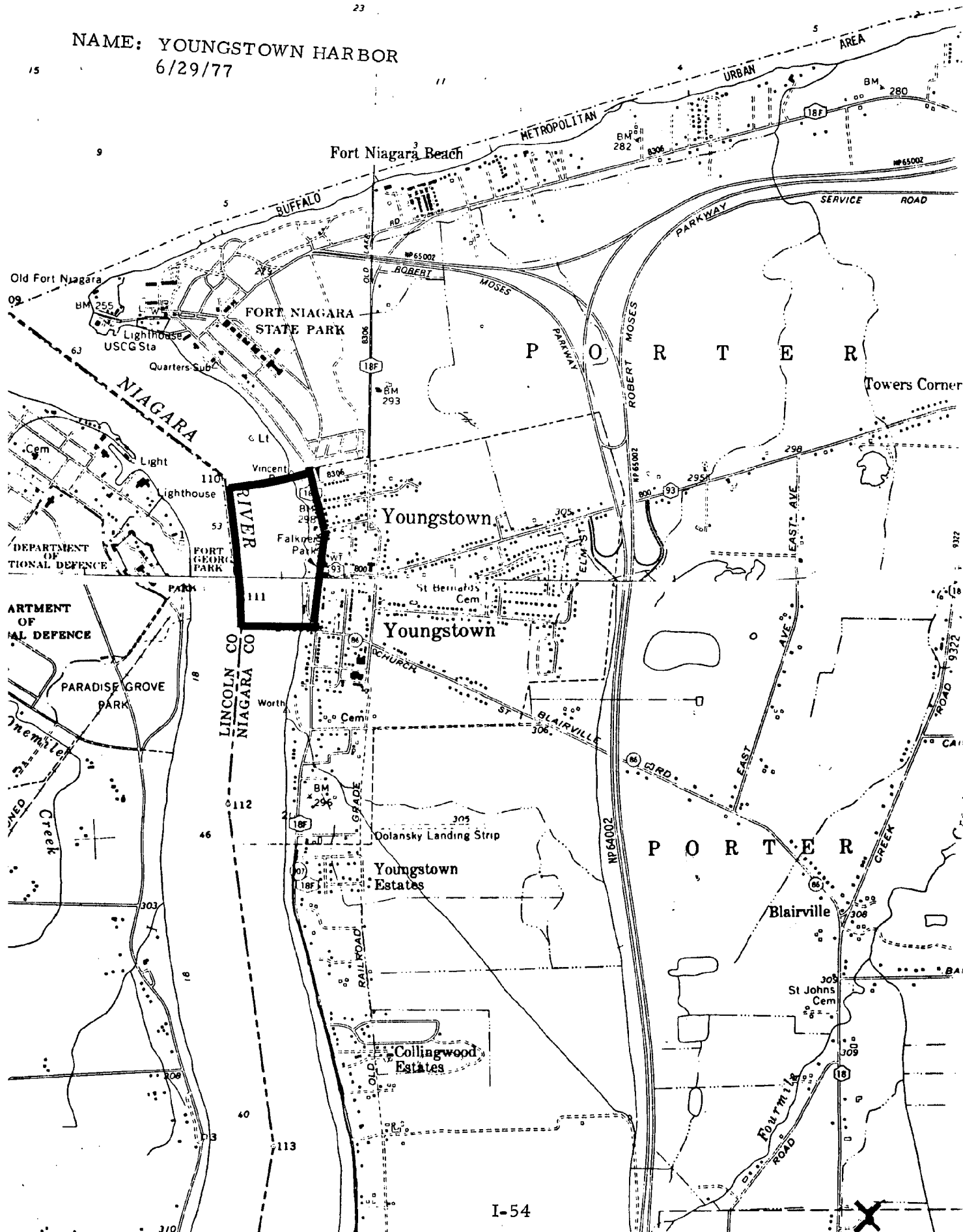
I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Youngstown Harbor
- B. Location: The GAPC is located in the Village of Youngstown, Niagara County, New York. The actual boundaries are shown on the attached map to this GAPC summary sheet.
- C. Type: Historic and recreational resource
- D. General Area Description: The harbor area encompasses a unique setting along the lower Niagara River. It provides a natural harbor for small craft and moors a large sail boat fleet during the summer months. The GAPC also includes a portion of the Village of Youngstown marin-commercial district which reflects a strong historic past. The land area east of the GAPC includes low density residential development and rural farmland.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. Performance standards are necessary to protect the historic and aesthetic quality of the harbor area from incompatible land uses.
 - 2. The steep slope adjacent to the river is suffering from erosion problems. Therefore, shoreline development should adhere to strict performance criteria prior to actual construction.
- B. Statewide Value
 - 1. The GAPC is a significant historic and recreational resource to residents of New York State.

NAME: YOUNGSTOWN HARBOR
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: LOWER RIVER SCENIC
RESIDENTIAL COASTAL AREA

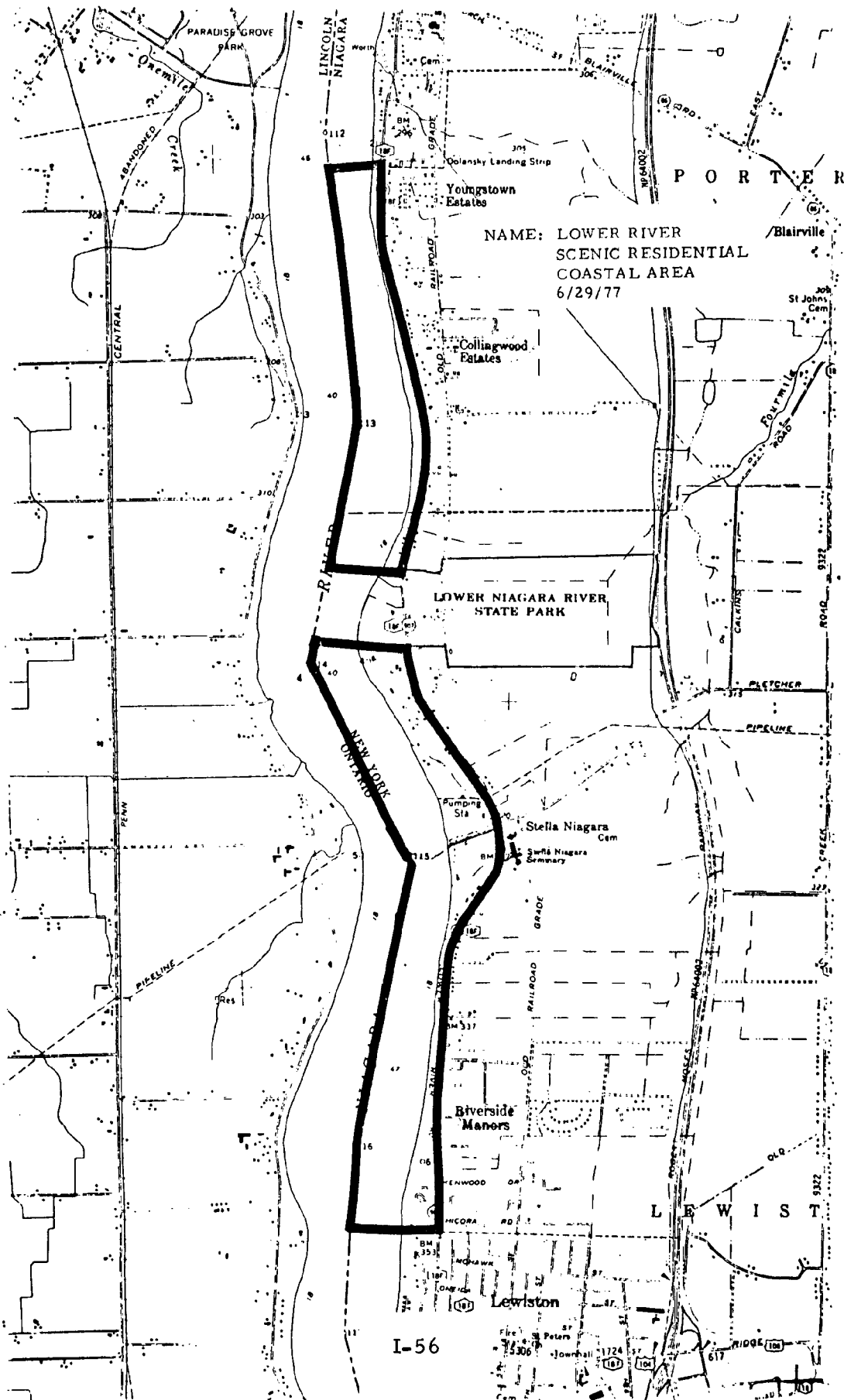
I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Lower River Scenic Residential Coastal Area
This excludes Joseph Davis State Park and the Stella Niagara
Drift Area.
- B. Location: The area is located in the Towns of Porter and Lewiston
and situated along the shore of the Niagara River. The boundaries
include the eastern right-of-way along Lower River Road on the
east; the International Boundary within the Niagara River on the
west; the Village of Youngstown/Town of Porter municipal
boundary to the north; and the Village of Lewiston/Town of Lewiston
northern municipal boundary to the south (refer to map).
- C. Type: Scenic Residential Area
- D. General Area Description: The area is a unique rural residential
district with many large and elegant homes bordering the shoreline
area. The area affords a beautiful view of the river and is one of
the few relatively open areas along the Niagara River.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: The shoreline is suffering from severe
coastal erosion. This poses a problem to physical structures located
immediately adjacent to the shore. It is necessary to impose
building performance standards within the GAPC to prevent severe
physical and economic losses.
- B. Statewide Value: The area is one of the few open areas affording
an excellent view of the Niagara River. This region is also one of the
few sections of the International boundary that is elegantly rustic
and aesthetically pleasing. Most of the Niagara River shore is heavily
industrialized. Access and maintenance of the neighborhood character
is essential for well-balanced development of the coastal zone.

6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: CHEM-TROL AREA

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Chem-Trol Area
- B. Location: Chem Trol is situated in the Town of Porter, Niagara County, New York. It is in the south central portion of the township bounded on the south by the Lewiston town line, on the north by Balmer Road, on the west by Lutts Road, and Porter Center Road on the east (refer to map).
- C. Type: Waste Disposal Area
- D. General Area Description: The Chem-Trol disposal site is located in flat rural farm land with active farms located within a four mile radius of the site. The site itself is an old abandoned military base that was formerly used to produce sodium borate. The latter is a nuke rocket propellant. There are still spent rocket fuels stored in areas adjacent to the Chem-Trol operation.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing the Area
 - 1. Subsurface conditions of the site are of a bedrock Queenstown shale with 40 to 60 feet of overlaying sand and clay-layers. Twelve to twenty inches of fractured Queenstown shale exists between the highly impermeable clay and shale. This fractured shale is highly permeable and could conduct contaminated groundwater to the Niagara River and Lake Ontario
 - 2. There is evidence that leachate from the spent rocket fuel disposal site may have leaked out into the Youngstown area as indicated by the presence of higher than normal boron levels in wells. It is important to note that the only source of boron in the area is the spent rocket fuel site.
 - 3. Storage of radio active wastes exists on the same former military base. It is not, however, part of the Chem-Trol operation.

CZM-GAPC-Chem-Trol Area

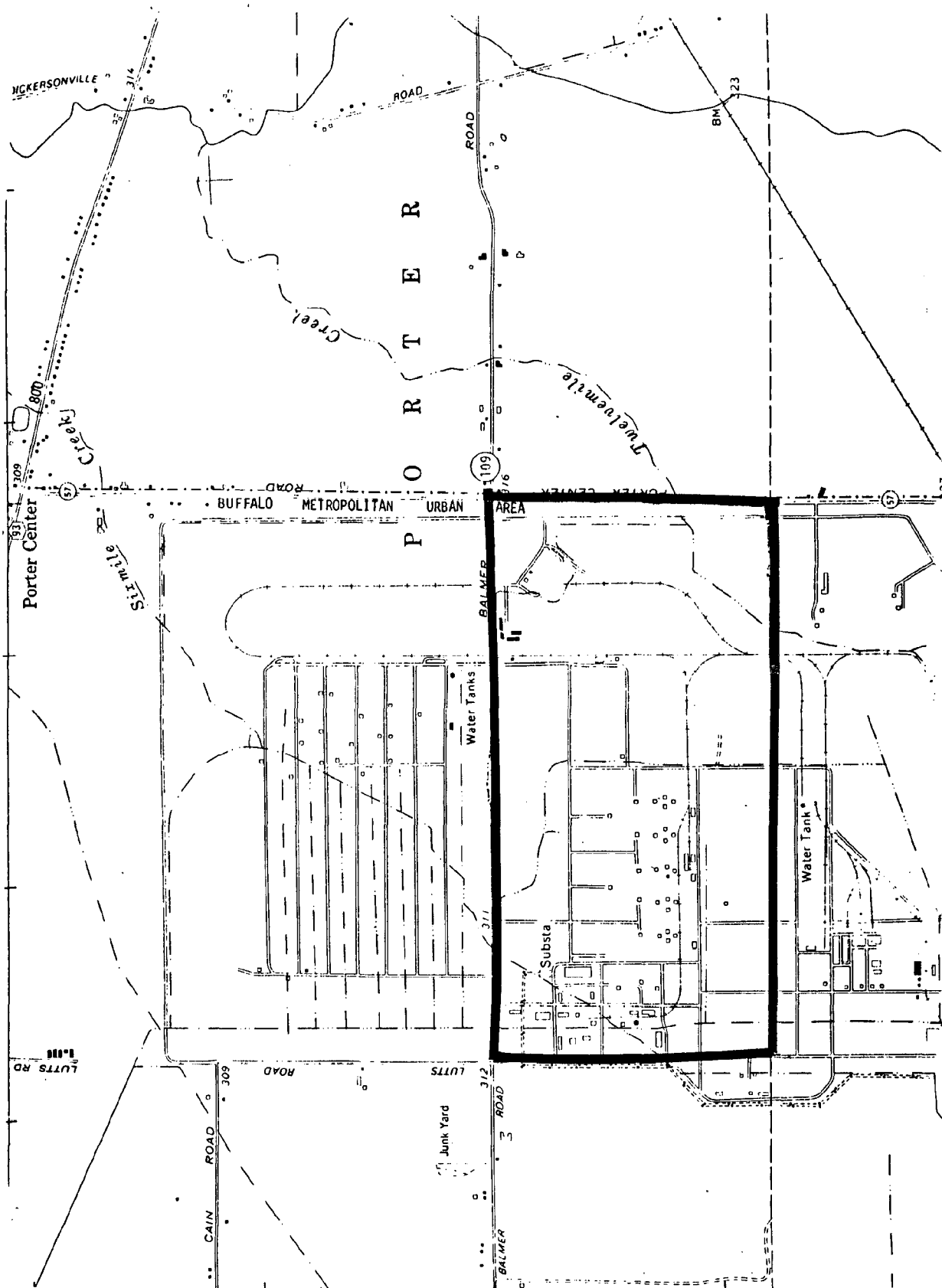
Page two

4. Special interest should be given to the sodium borate rocket fuel which was stored on the adjacent site. It is reported that this chemical probably migrated to the Youngstown area. Wells which have been tested within Youngstown indicate a boron concentration above normal levels. It should be noted that the only potential sources of boron in the Youngstown area would be the rocket fuel storage site in Porter (i. e. adjacent site.) If a boron migration has occurred there is a possibility that chemicals contained at Chem-Trol could also contaminate groundwater and effect the quality of coastal waters.

- B. Statewide Value: The GAPC does not represent a major value to Statewide residents.

6/30/77

NAME: CHEM-TROL AREA 6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: JOSEPH DAVIS STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREAS OF PARTICULAR CONCERN
(GAPC)

- A. Name: Joseph Davis State Park
- B. Location: The Park is located on the east shore of the Niagara River within the Town of Lewiston, Niagara County, New York. It is approximately 6 miles north of the City of Niagara Falls. The actual GAPC boundary follows the State Park property line, with the west boundary extending to the International boundary line in the Niagara River (refer to map).
- C. General Area Description: The site contains 388 acres of parkland with facilities for swimming, fishing and picnicking. A small portion of the Park is situated adjacent to the Niagara River. However, the majority of park acreage lies further inland and contains the major recreation facilities.

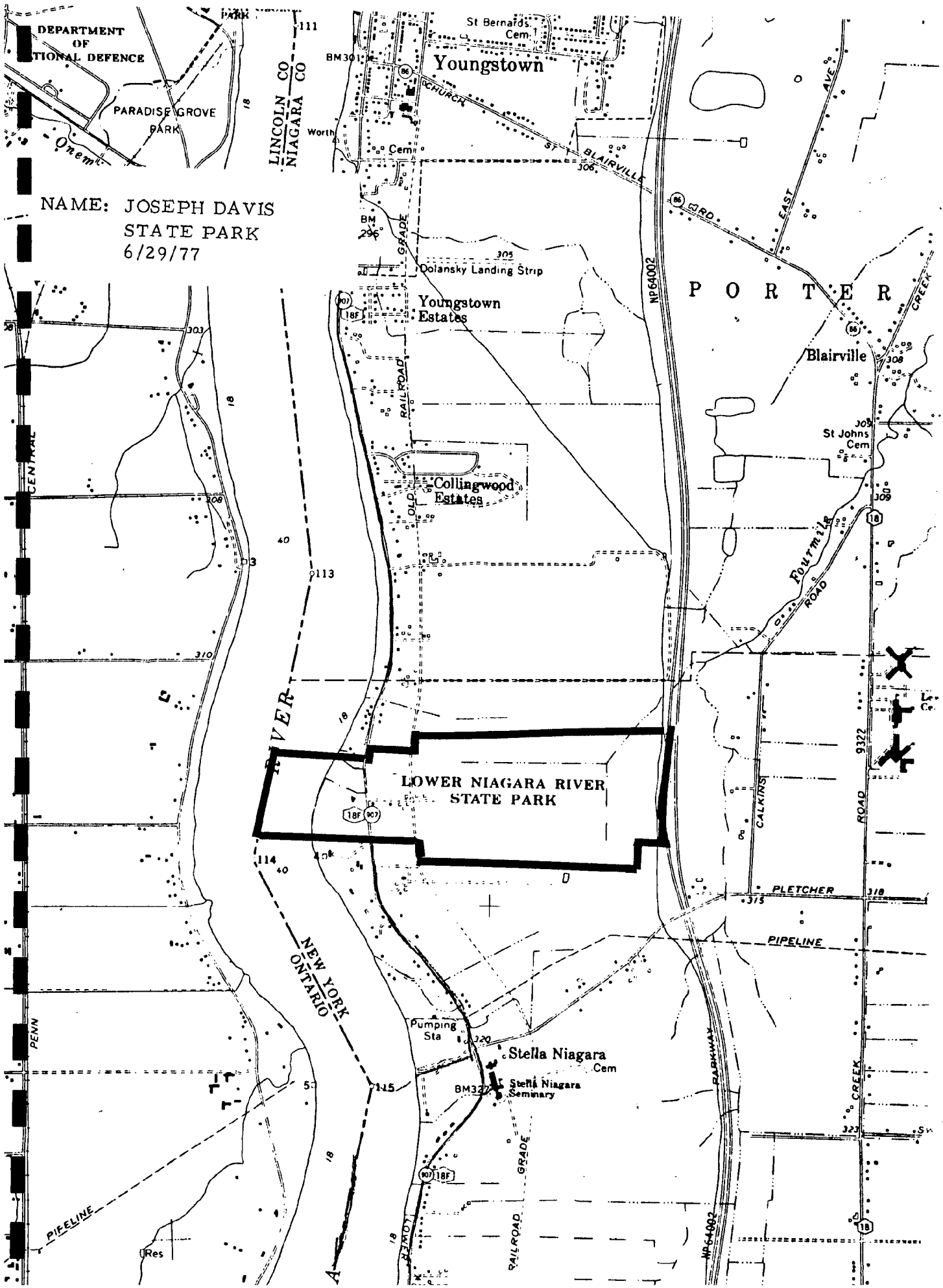
Major transportation routes serving the Park include the Robert Moses Parkway which extends along the east Park boundary and New York State Route 18F (Lower River Road). The latter bisects the Park as it travels north from the Village of Lewiston to Youngstown.

Land use surrounding the park includes low density residential areas along the river as well as rural sections east of the site.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. New York State has recognized the value of Joseph Davis State Park as an open space resource by acquiring the land for public use.

6/30/77



NAME: JOSEPH DAVIS
STATE PARK
6/29/77

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: STELLA NIAGARA DRIFT AREA

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Stella Niagara Drift Area
- B. Location: The drift area includes the Niagara River water body from Stella Niagara Flats in the Town of Lewiston downstream to the Village of Youngstown municipal boundary (refer to map).
- C. Type: Fish habitat area
- D. General Area Description: The area is a valuable fishing spot with minimal public access provided at Joseph Davis State Park. The GAPC is bordered by low density residential development.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. Possible encroachment on the fishing activity and water quality may occur if an industrial discharge is permitted adjacent to the drift area. Currently, the Town of Lewiston owns a utility easement along Pletcher Road to the Stella Niagara Drift GAPC. The outfall is not operating at the present time, but Chem-Trol Pollution Services, Inc. is requesting permission from the Town of Lewiston to discharge processed toxic wastes at the above point. Such information was provided by Mr. John Bartolomei, Lewiston Town Attorney on August 29, 1977 (telephone conversation).
 - 2. Public access to the GAPC is very poor and prevents maximum public use of the fishing area.
- B. Statewide Value: The area is visited annually by tourists visiting the Lower River area. The presence of Artpark and Fort Niagara State Park has a potential spin off effect on recreational fishing within the Stella Niagara Drift area. Therefore, it would be to the interest of New York State to protect the fish habitat area.

6/30/77

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P O R T

**LOWER NIAGARA RIVER
STATE PARK**

NEW YORK
LIBRARY

I-63
VIAGRA-

Stella Niagara
Seminary

Stella Niagara
Seminary

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: LEWISTON ART PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Lewiston Art Park
- B. Location: Art Park is located on the east shore of the Niagara River, with the Village of Lewiston to the north and the Queenston-Lewiston Bridge to the south. It is situated within the municipal boundaries of the Town and Village of Lewiston, Niagara County, New York. The actual GAPC boundary follows the existing State Park property lines, but extends seaward to the International boundary line. The latter forms the west GAPC boundary.
- C. Type: StatePark/Cultural Resource
- D. General Area Description: Art Park is intended as a passive recreation and cultural resource for citizens throughout New York State. In addition to existing natural resources, various cultural facilities are located within the Park. These include a Performing Arts Center, Amphitheater, Artel, and support facilities. The park encompasses 90 acres with the main development site located on the lower slope of the Niagara Escarpment. The Niagara River/parkland interface is characterized by a steep slope which provides a unique view of the river area.

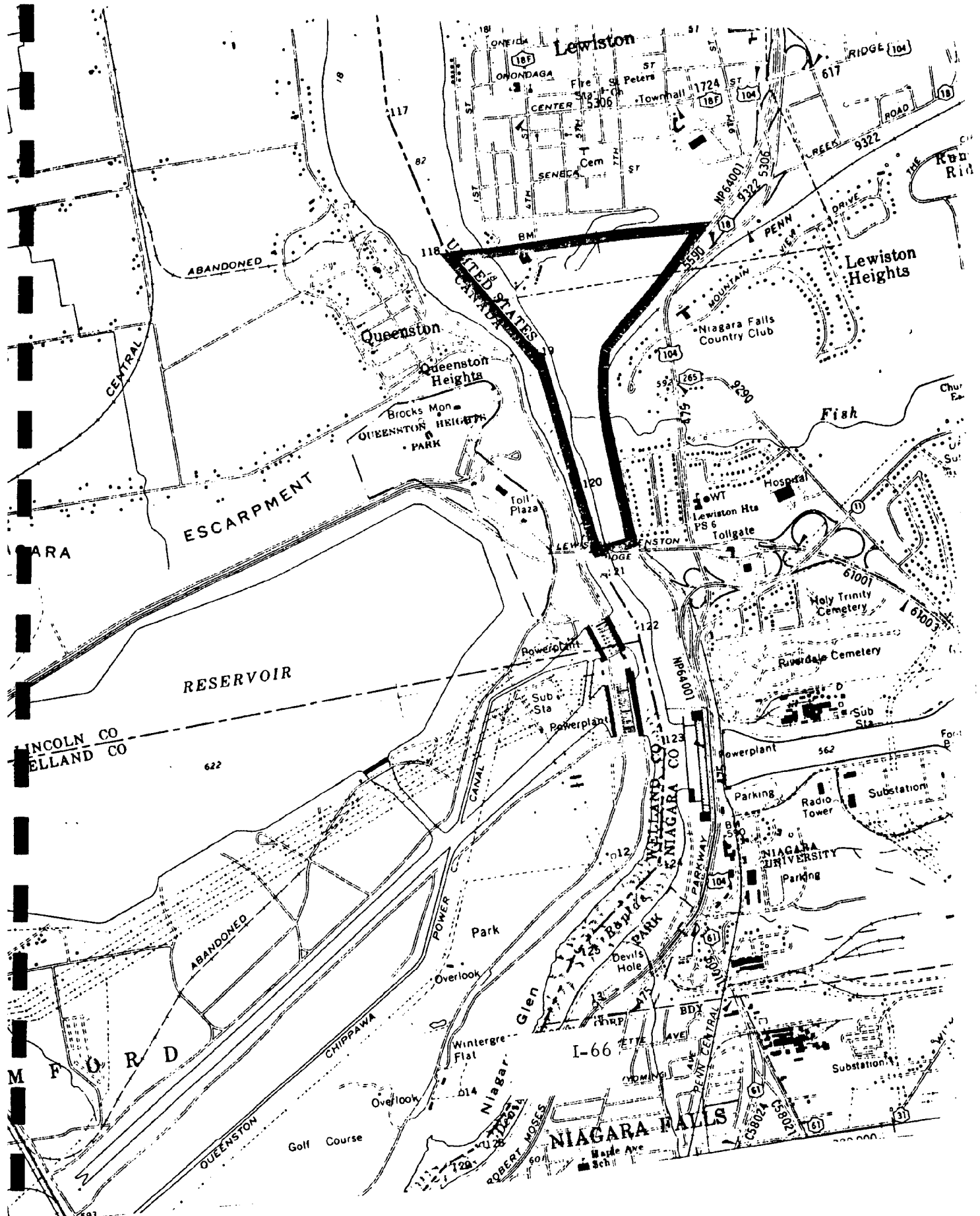
Numerous historic sites are located within the Park boundaries. These include the Lewiston Mound site and the former Lewiston Portage landing area along the Niagara River.

The land use surrounding the site includes low and medium density residential areas as well as the Robert Moses Parkway. The latter is located along the Park's east boundary line.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. New York State has recognized the value of Art Park as a passive recreation/cultural resource by acquiring the land for statewide enjoyment.

6/29/77



CZM-GAPC-Lewiston Art Park
Page two

2. Due to increased tourist traffic into the area, various commercial enterprises and local municipalities are experiencing positive economic benefits.
3. The park provides an excellent educational resource for New York State. Numerous cultural events are conducted during the park season which offer a variety of educational benefits. In addition, the unique natural resources within the park provide an opportunity for nature trails and other natural education pursuits.
4. The Art Park site utilizes the Niagara Escarpment and river gorge to provide a scenic vista unique to New York State.
5. New York State has identified the eastern bluebird as the state bird. It is a rare species and nests in the river gorge west of the Performing Arts Center. Other bird species are also prevalent throughout the park site.
6. Art Park is the location of numerous historic sites. These include the Lewiston Portage Landing Site, the Lewiston Indian Burial Mound, and the Great Gorge Railway Tracks site.

6/30/77

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREA OF PARTICULAR CONCERN

NAME: POWER AUTHORITY FACILITIES, STATE OF NEW YORK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Power Authority Facilities State of New York
- B. Location: The Power Authority facilities are located on the Niagara River east shore approximately $4\frac{1}{2}$ miles north of the City of Niagara Falls. It is within the Town of Lewiston, Niagara County, New York with the southern portion within the Town of Niagara, Niagara County. The actual GAPC boundary is outlined on the attached map.
- C. Type: Reservoir/Power Generating Facility/Scenic Vista/State Park
- D. General Area Description: The GAPC consists of three main areas. These include the Power Authority structures, Reservoir, and the Reservoir State Park. The former encompasses the Robert Moses Niagara Power Plant situated on the east shore of the Niagara River Gorge. The plant is approximately 1,933 feet long and 389 feet high. The power plant generally consists of an intake structure at the top of the gorge and generating equipment at the bottom connected by penstocks.

The storage reservoir holds extra water diverted from the river at night. The embankment surrounding the reservoir averages 55 feet in height and is 260 feet wide at the bottom and 40 feet wide at the top. The reservoir covers about 1,900 acres and has a capacity for 20 billion gallons of water. Water is stored above the natural ground surface.

The Reservoir State Park includes 132 acres of land for varied recreational use. It is situated just south of the Lewiston Pump-Generating Plant which is located at the west end of the Reservoir.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.

B. Statewide Value

1. The PASNY facility in Lewiston is the largest hydro-electric development in the western world. The average power generated at Niagara equals 13 billion kilowatt hours per year of electrical energy.
2. The scenic vista evident at the PASNY facility and river gorge are unique to New York State.

6/30/77

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COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: DEVIL'S HOLE STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Devil's Hole State Park
- B. Location: The Park is located on the east bank of the Niagara River immediately north of Niagara Falls. The area is within the Town of Lewiston, Niagara County, New York, municipal boundaries. It should be noted that the Robert Moses Parkway forms the east boundary of the park. The actual GAPC follows the Devil's Hole State Park property lines, but extends seaward to the International boundary line. The latter forms the west boundary.
- C. Type: State Park
- D. General Area Description: Devil's Hole State Park is adjacent to the Niagara River and is within the Niagara Gorge geologic formation. The Robert Moses Parkway is located immediately east of the Park. The GAPC contains 42 acres and provides hiking, biking, and picnicking facilities. The Park is well maintained and protects the best areas adjacent to the gorge from visual disruption. The facility is maintained by the Niagara Frontier State Parks and Recreation Commission and occupies the site of the Devil's Hole Massacre. This occurred in 1763 when the Seneca Indians ambushed a wagon train going to Lewiston, New York.

The area east of the Park is within the Town of Lewiston and is characterized by commercial/residential land uses.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. New York State has recognized the value of Devil's Hole State Park as an open space/scenic resource by acquiring the land for public use.

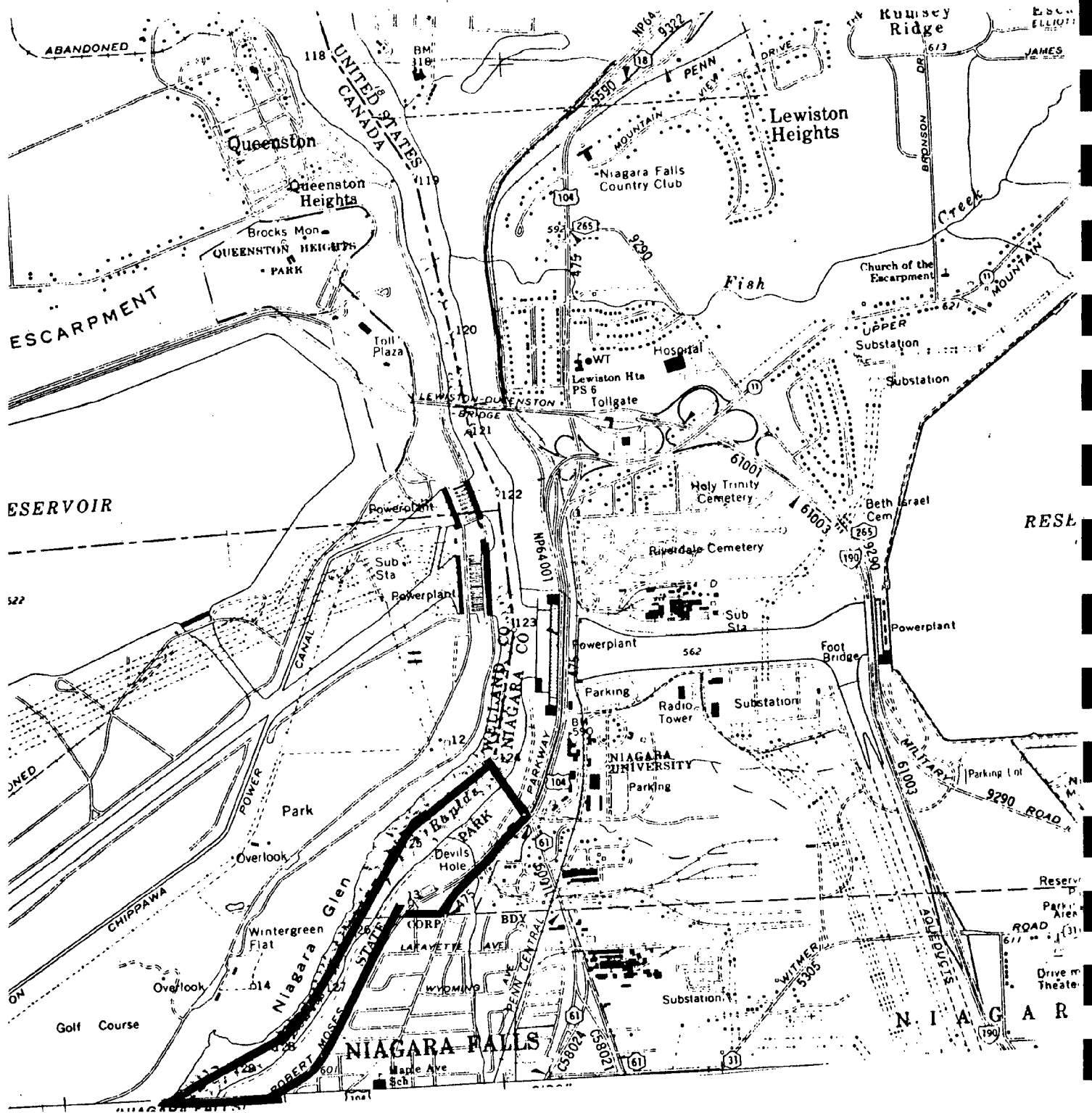
CZM-GAPC-Devil's Hole State Park

Page two

2. The Park has historic significance as the site of Devil's Hole Massacre in 1763.
3. The Park has scenic value to tourists visiting the Niagara Falls area. It is adjacent to the Niagara Gorge and provides unique scenic vistas of the River as it flows through the gorge formation.

6/30/77

NAME: DEVIL'S HOLE STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: WHIRLPOOL STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Whirlpool State Park
- B. Location: The Park is located on the east shore of the Niagara River and three (3) miles north of the Falls formation. It extends from the Whirlpool Rapids Bridge northward to the City of Niagara Falls Town of Lewiston municipal boundary. The entire Park is within the City of Niagara Falls jurisdictional limits with the actual GAPC boundary following the State Park property lines. However, the north and south boundaries extend seaward to the International boundary line. The latter forms the west boundary line.
- C. Type: State Park/Scenic Vista/Unusual Geologic Formation
- D. General Area Description: Whirlpool State Park is maintained by the Niagara Frontier State Parks Recreation Commission and encompasses 109 acres adjacent to the Niagara Gorge. The Park extends in a linear manner along the River and eventually connects with Devil's Hole State Park to the north. The River and Gorge area is characterized by sheer cliffs which form the embankments for the fast flowing Niagara River. The actual whirlpool is a major scenic attraction and can be viewed from overlooks or aerial observation cars originating in Queen Victoria Park, Canada. Automobile access to the Park occurs off the Robert Moses Parkway which is situated within the Park limits.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. Vertical access to the Gorge is inadequate and prevents full utilization of the Park for hiking activities.
 - 2. Automobile access to Whirlpool State Park is awkward. Such access occurs off the Robert Moses Parkway which often serves as high speed thoroughfare. This creates safety problems and is not compatible with the Park environment.
 - 3. Pedestrian access to Whirlpool State Park is prohibited due to the Robert Moses Parkway. The latter serves as a manmade barrier and does not permit full integration of the Park with the City of Niagara Falls.

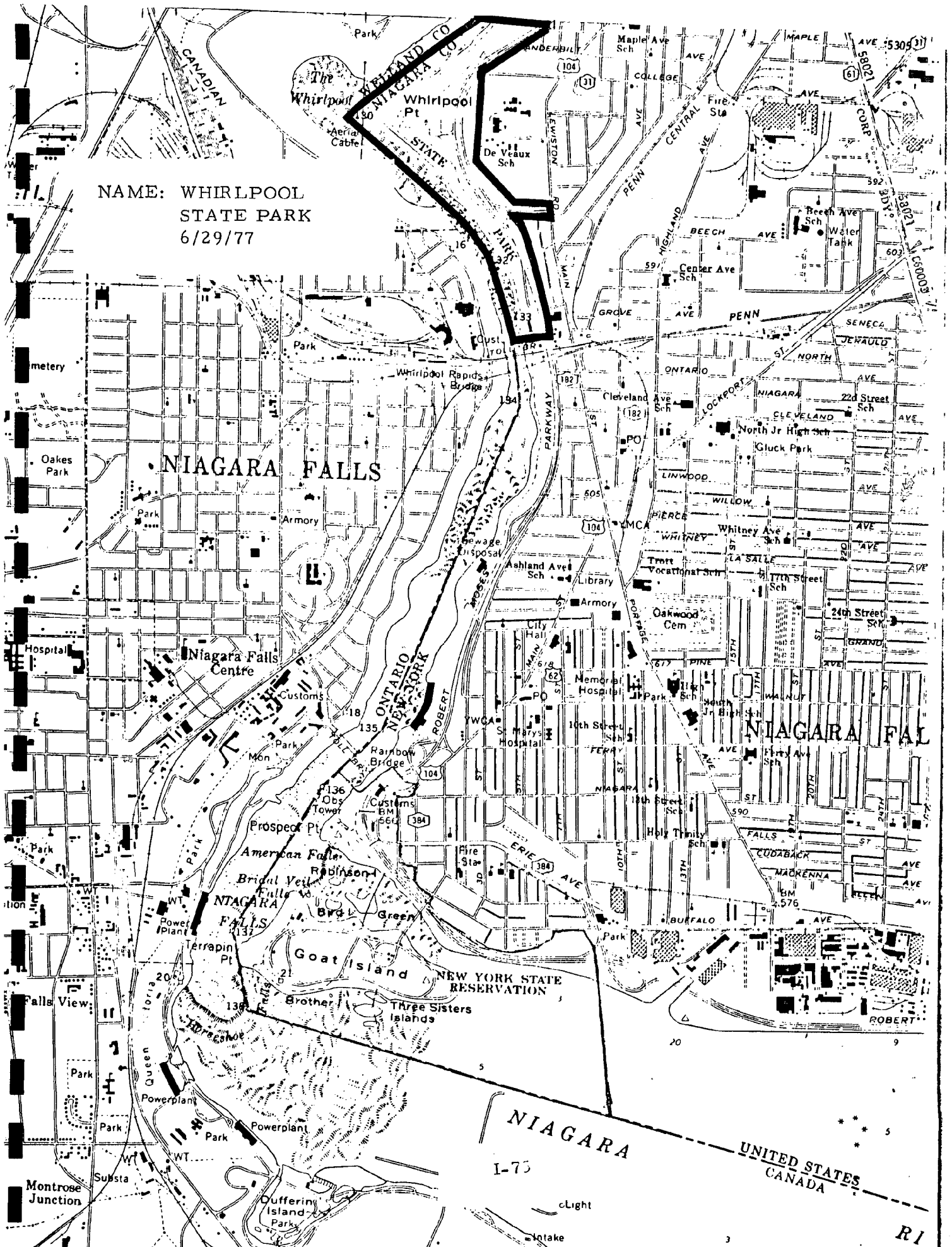
B. Statewide Value

1. New York State has recognized the value of the Whirlpool State Park as an open space/scenic resource by acquiring the land for public use.
2. The gorge and whirlpool formations are unique to New York State and provide outstanding scenic vistas for Park visitors.
3. The Niagara Falls/gorge area attracts millions of tourists to the region each year and provides approximately \$150 million in sales to New York State annually.* It is imperative to protect the natural features of gorge/whirlpool from encroaching tourist development while maintaining the area as a viable tourist attraction.

*Source: Erie and Niagara Counties Regional Planning Board Adopted
Niagara River Environmental Plan (1975)

6/29/77

NAME: WHIRLPOOL
STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: NIAGARA RIVER GORGE

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Niagara River Gorge
- B. Location: The gorge area is located on the east shore of the Niagara River. It is immediately below the Niagara Falls geologic formation and is situated within the City of Niagara Falls, Niagara County, New York. The GAPC boundaries include the Niagara Reservation State Park property line to the south, the Robert Moses Parkway eastern right-of-way line on the east, the Whirlpool State Park property line to the north, and the international boundary line to the west. The latter is located within the Niagara River.
- C. Type: Unusual Geologic Formation/Scenic Vista
- D. General Area Description: The fast flowing Niagara River below the Falls has been responsible for the gorge formation. The gorge walls are sheer, and the waters churn through them with tremendous power. The land use adjacent to the gorge is mainly in the public domain. This is characterized by the Robert Moses Parkway which serves as the GAPC's eastern boundary. It should also be noted that the area east of the Parkway is characterized by commercial and high density residential areas. Other significant land uses adjacent to the gorge include the Niagara Falls Sewage Treatment Plant, Niagara Falls Geologic Museum, and the Old Schoellkopf Power Plant.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
1. Pedestrian access to the gorge is hindered by the lack of access points off the Robert Moses Parkway. In addition, vertical movement facilities into the gorge are limited to tourists wishing to view the River from the base of the gorge.
 2. High rise residential structures, huge observation towers, and sewage treatment facilities detract from the scenic quality of the gorge area.
- B. Statewide Value
1. The Niagara River gorge presents unique geologic formation for scenic and educational use.

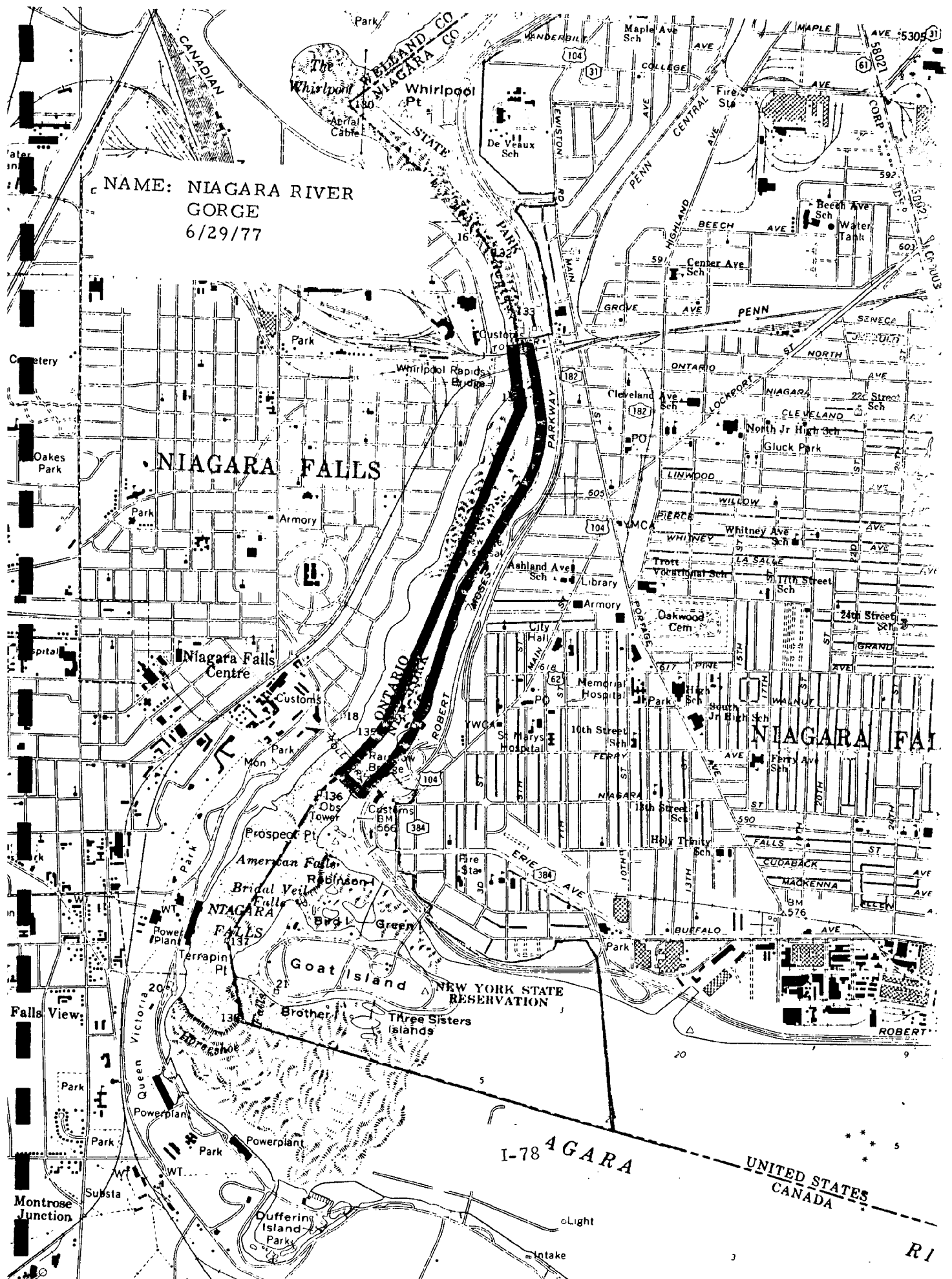
B. Statewide Value (Cont.)

2. The Niagara Falls/gorge area attracts millions of tourists to the region each year and provides approximately \$150 million in sales to New York State annually*. It is imperative to protect the natural features of the gorge from encroaching tourist development while maintaining the area as a viable tourist attraction.

* Source: Erie and Niagara Counties Regional Planning Board Adopted Niagara River Environmental Plan (1975)

6/30/77

NAME: NIAGARA RIVER
GORGE
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: NIAGARA RESERVATION STATE PARK

I. DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Niagara Reservation State Park
- B. Location: The park is within the municipal boundaries of the City of Niagara Falls, Niagara County, New York. It includes the land and water areas which form the Niagara Falls geologic formation. The actual GAPC boundary is the state park property lines.
- C. Type: State Park/Scenic Vista/Unusual Geologic Formation/Historic Area
- D. General Area Description: The Niagara Reservation State Park is maintained by the Niagara Frontier Parks Commission and encompasses 435 acres adjacent to the Falls. It contains pic-nicking, biking, and scenic viewing facilities for park visitors.

The park includes the Niagara Falls formation as well as the upper rapids area. The Falls are divided into three cataracts by the presence of Goat and Luna Islands at its crest. The Horseshoe Falls is 176 feet high and 2,200 feet long. This is the largest cataract, but is located in Canada and therefore outside the GAPC. The American Falls is 184 feet high and 1,060 feet long at the crest. Bridal Veil Falls descends over the escarpment between Goat and Luna Islands. The latter cataract is only 15 feet wide.*

Through centuries of erosion, a great rock mass has accumulated at the Falls base. In addition, sudden rock falls have occurred at the American Falls. This has detracted from the parks splendor and has created serious safety hazards.

The land use within and surrounding the park includes the Robert Moses Parkway. This thoroughfare provides few scenic amenities to travelers and is bordered by an industrial complex east of the Falls. The complex dominates the landscape and detracts from the scenic approach to the park. The Niagara Falls municipal area adjacent to the park supports tourist/commercial structures. Such structures are numerous and often reflect poor design features. The Niagara Falls central business district is undergoing a large urban renewal program (i. e. Rainbow Development Project). This program includes a convention center, shopping/office complex and an open space promenade.

II. STATEWIDE INTEREST IN AREA

A. Problems Facing Area

1. Erosion is a serious problem at the American Falls and Luna Island.
2. There is no urban open space penetration (parks) to the shoreline.
3. Tourist activities are concentrated in downtown Niagara Falls. This creates congestion and the structures lack good design quality.
4. The Robert Moses Parkway does not serve as an adequate tourist "gateway". It passes through a heavy industrial area and detracts from the scenic approach to the Falls.

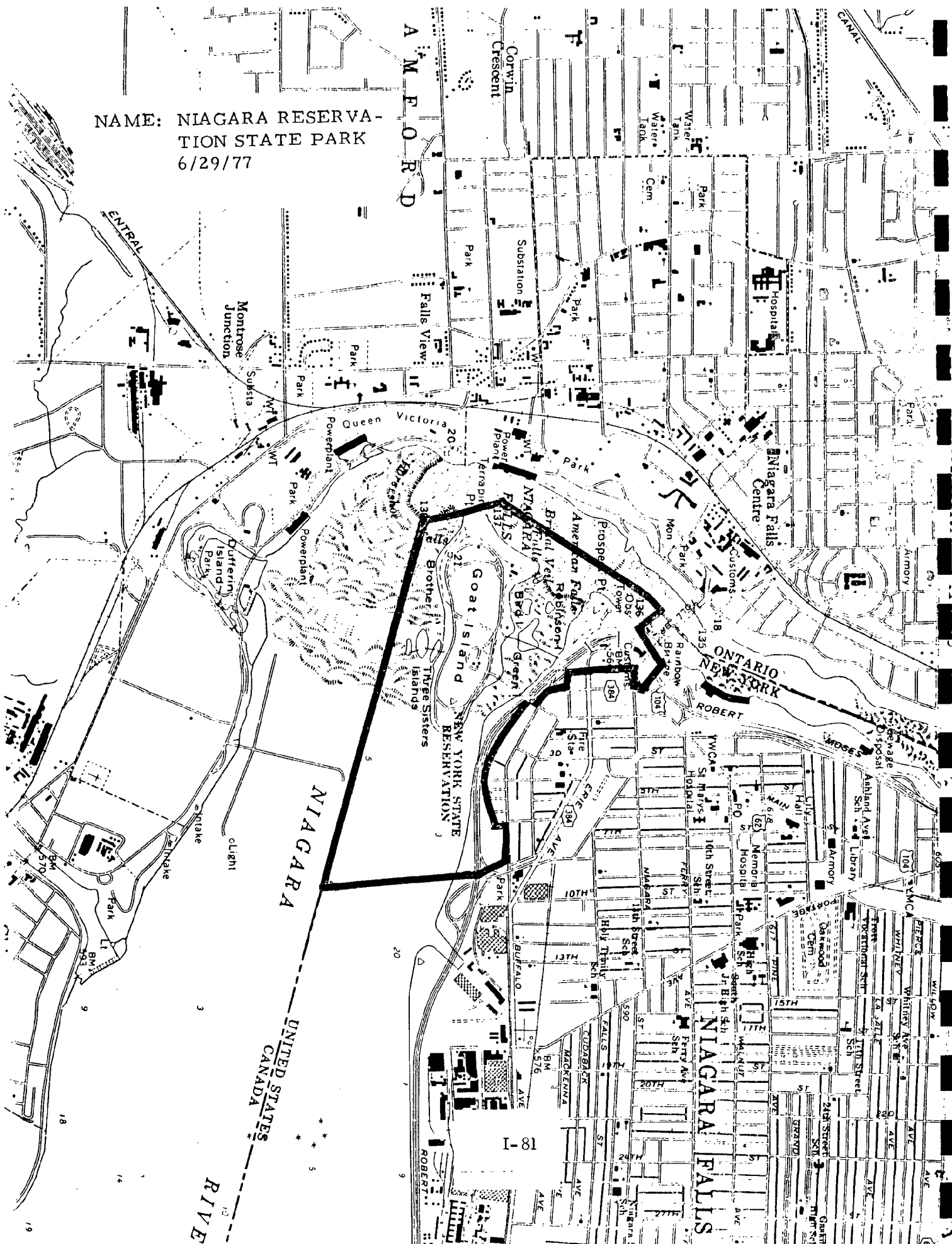
B. Statewide Value

1. New York State has recognized the value of the Niagara Reservation State Park as an open space/scenic resource by acquiring the land for public enjoyment.
2. The Niagara Reservation State Park is listed on the National Register of Historic Places.
3. The unusual geologic formations are unique to the United States. These offer a valuable educational and scenic resource to New York State residents.
4. The Niagara Falls area attracts over 5,000,000 tourists each year. In addition, it is estimated that \$150,000,000 in tourist sales accrue to New York State annually.*

*Source: Erie and Niagara Counties Regional Planning Board Adopted
Niagara River Environmental Plan (1975)

6/29/77

NAME: NIAGARA RESERVATION STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: POWER AUTHORITY, STATE OF NEW YORK WATER INTAKES

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Power Authority, State of New York Water Intakes
- B. Location: The GAPC is located within the boundaries of the City of Niagara Falls, New York. The Intakes are located south of the Robert Moses Parkway between a line extending south of New Hyde Park Blvd. and a line extending south from 47th Street. The boundary on the south extends to the International boundary within the Niagara River. The attached map shows the exact location.
- C. Type: Hydro electric water intakes/scenic vista
- D. General Area Description: The GAPC is characterized by two towers located between the Robert Moses Parkway and the Niagara River. Parking is available to view the river from the area around the Intake towers. Land Use adjacent to the site is primarily industrial.

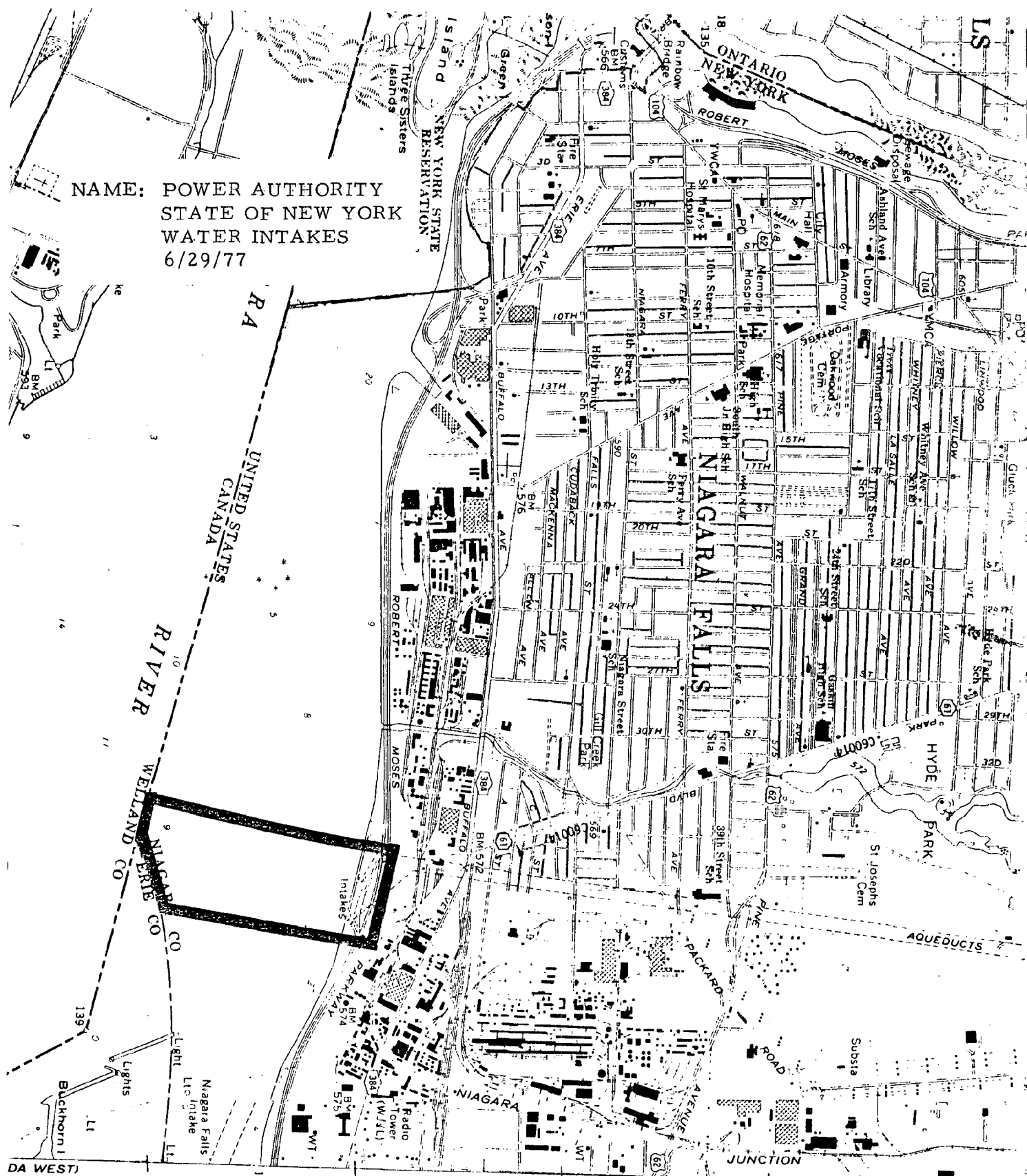
II STATEWIDE INTEREST IN THE AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value

The Power Authority of the State of New York utilizes the site for withdrawing water from the Niagara River for its Lewiston Plant. The latter Plant is a major power generator in the Northeastern United States.

6/29/77

NAME: POWER AUTHORITY
STATE OF NEW YORK
WATER INTAKES
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: LOVE ROAD CANAL

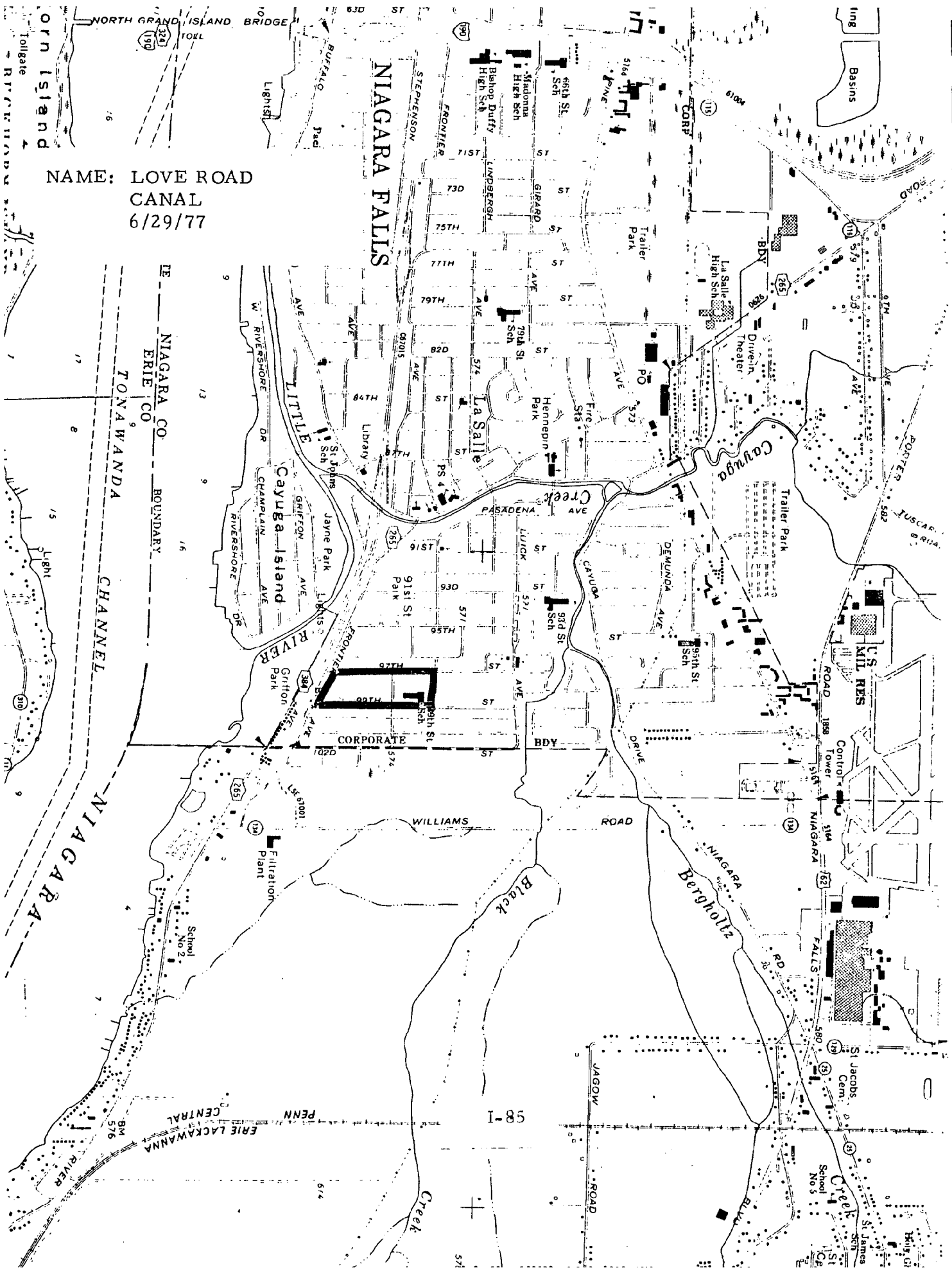
I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Love Road Canal
- B. Location: The GAPC is located in the City of Niagara Falls, New York. Reference should be made to the attached map for the exact boundary.
- C. Type: Abandoned Waste Disposal Site
- D. General Area Description: The GAPC is the location of a former chemical deposit site used by Hooker Chemicals and Plastics in the late 1940's and early 1950's. A school has since been built on the location as well as homes on 97th and 98th Streets.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. Leachate from the former disposal site have been leaking into area homes and storm sewers that eventually discharge into the Niagara River. It is imperative that this leachate be stabilized to protect area residents and the waters of the Niagara River.
- B. Statewide Value
 - 1. Protecting the Niagara River and Lake Ontario from toxic chemical contamination is a goal of the State of New York. Protective measure should be investigated to prevent further contamination of the river from this site.

6/29/77



NAME: LOVE ROAD
CANAL
6/29/77

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: GRIFFON PARK AND POSSIBLE EXTENSION

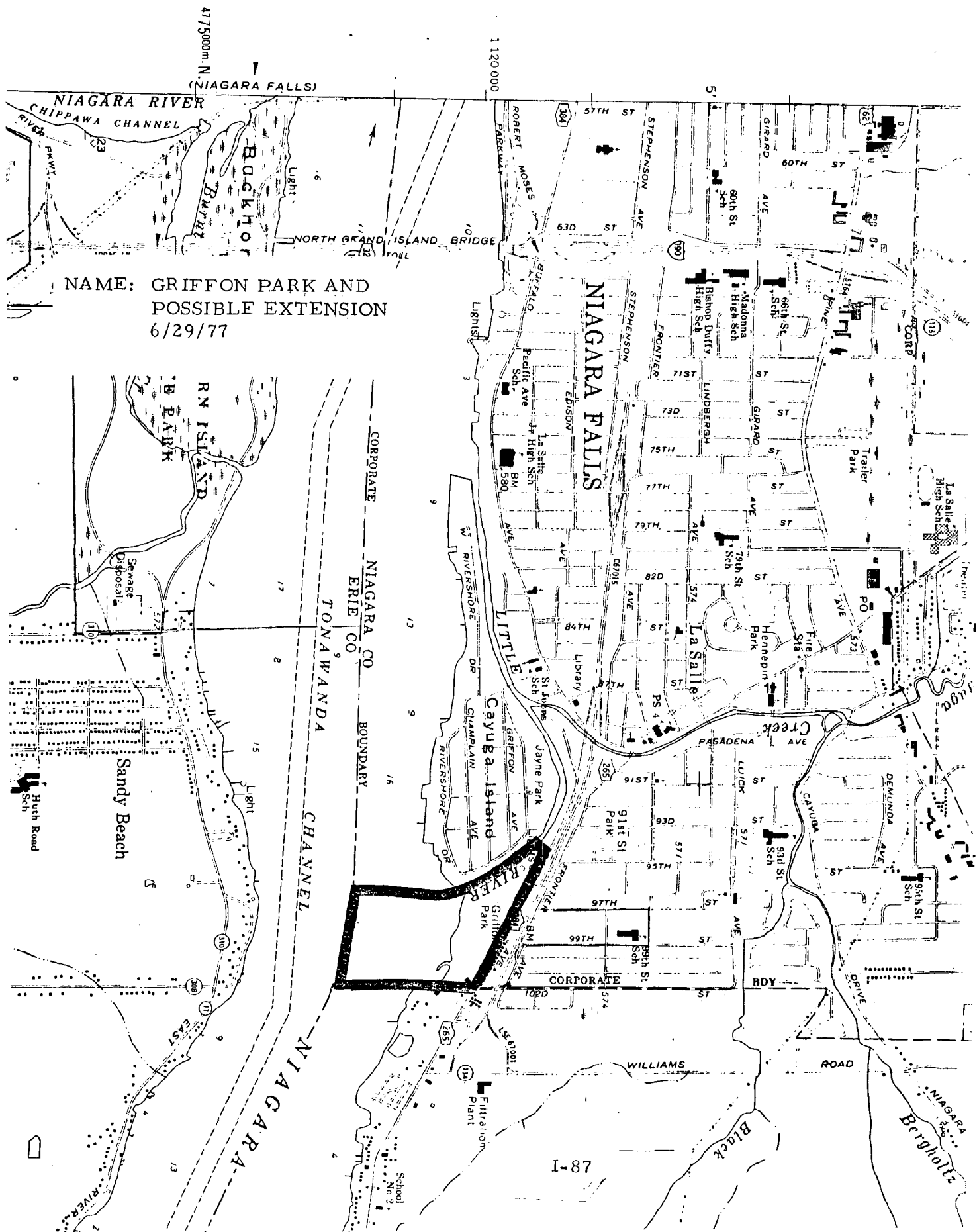
I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Griffon Park and Possible Extension
- B. Location: The Park is located within the City of Niagara Falls, New York. The actual GAPC boundaries are outlined on the attached map.
- C. Type: Park
- D. General Area Description: Griffon Park is a 20 acre municipal facility with a possible 20 acre addition immediately adjacent to the present site. The Park provides boat launching facilities, picnicking, athletic sports and various passive recreation uses. The surrounding area is residential with the LaSalle Expressway immediately north of the Park.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing the Area
 - 1. The proposed 20 acre Park extension is located over an abandoned toxic waste disposal area. Such a situation may cause possible leaching into the Niagara River.
 - 2. The LaSalle Expressway divides the residential neighborhood north of the highway from the recreational facilities at Griffon Park. Such a barrier necessitates automobile travel to the Park and unsightly pedestrian overpasses connecting the LaSalle residential neighborhood with Griffon Park
- B. Statewide Value: The GAPC does not represent a major value to Statewide residents.

6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: NORTH TONAWANDA COASTAL OPEN SPACE AREA

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: North Tonawanda Coastal Open Space Area
- B. Location: The GAPC is located within the City of North Tonawanda, Niagara County, New York. The boundaries include the Niagara County/Erie County jurisdictional line within the Niagara River on the west. The east boundary includes the eastern right-of-way line along N.Y.S. Rt. 265/384 (i.e. River Road). The southern boundary is the Niagara River Yacht Club southern boundary between River Road and the Niagara County/Erie County jurisdictional line within the Niagara River. Finally, the north boundary follows the Town of Wheatfield/City of North Tonawanda municipal boundary between River Road and Niagara County/Erie County jurisdictional line within the Niagara River.
- C. Type: Coastal Open Space Area
- D. General Area Description: GAPC is characterized by an existing municipal park (i.e. Gratwick Park), private yacht club, and vacant land. The topography is flat, permitting scenic vistas of the east channel of the Niagara River. Land uses adjacent to the site include a dense residential neighborhood east of N.Y.S. Rt. 265/384 and heavy industry south of the site.

II STATEWIDE INTEREST IN AREA

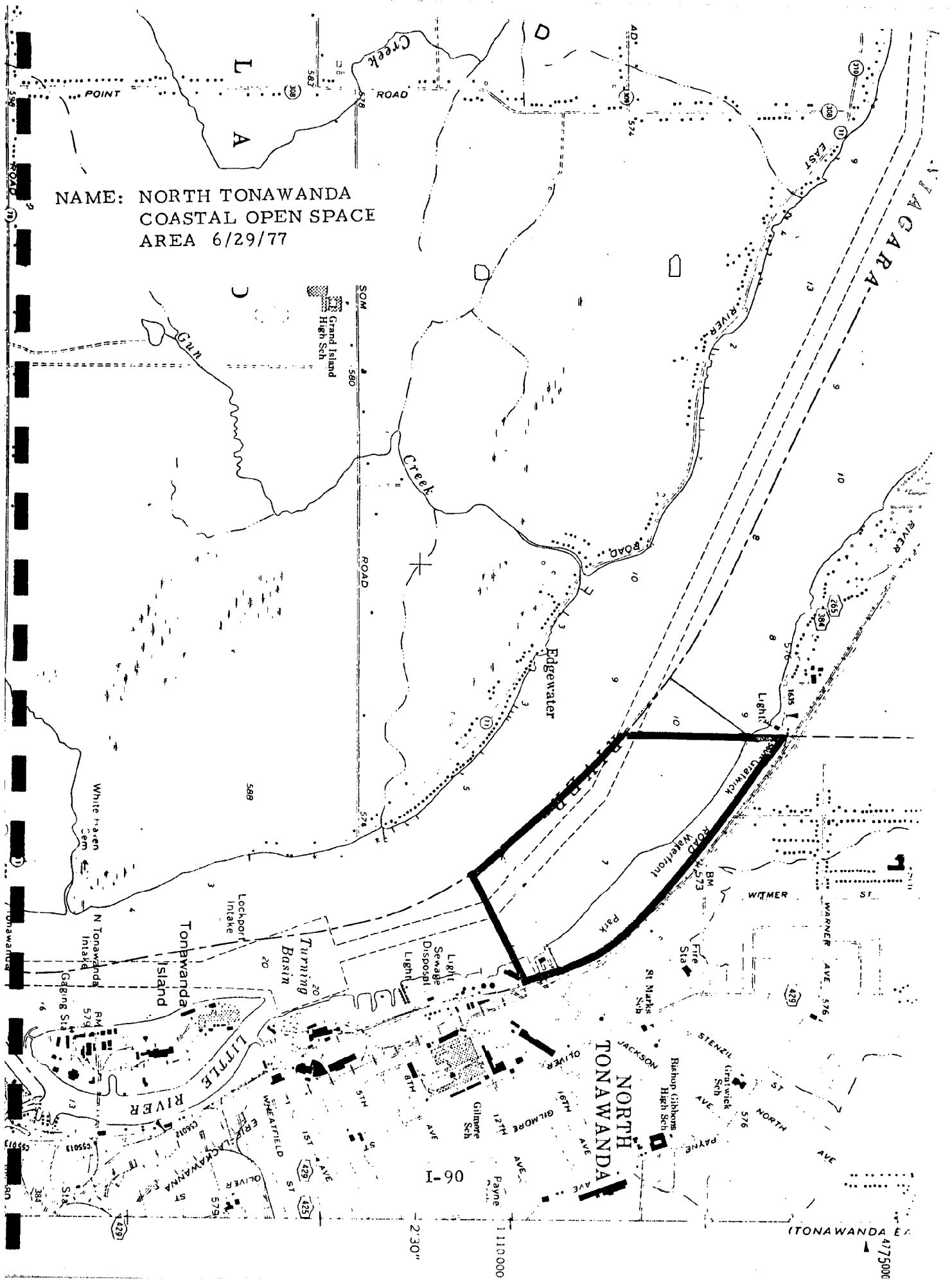
- A. Problems Facing the Area
1. The City of North Tonawanda leases the Gratwick Park site and therefore is limited in the installation of permanent park facilities. It is highly desirable for the City of North Tonawanda to obtain the ownership of the Gratwick Park area to insure permanent recreational facilities. The remaining portions of the GAPC could be acquired or leased. Delays in acquiring title to the land at the present time may leave the site vulnerable to other uses and restrict or prohibit access to the river.
 2. The surrounding land uses are characterized by heavy urban uses (i.e. dense residential development and heavy industry). Such characteristics increase development pressure along the Niagara River shoreline. This situation is magnified within the proposed GAPC due to existing vacant land within the site. It is imperative that a mechanism be established to reduce land/water use conflicts and encourage the most appropriate use for the area.

B. Statewide Value

1. The area is one of the few remaining vacant land areas that provide access to the Niagara River east channel. This GAPC has been proposed as open space in both the ENCRPB Upper Niagara River Recreation Study (1976) and the Adopted North Tonawanda Comprehensive Plan.
2. The surrounding intense land uses and the concurrent development pressure increase the importance of the North Tonawanda Coastal Open Space Area. Such a GAPC can provide immediate visual and physical recreation satisfaction to numerous residents within the immediate area and protect the site from encroaching uses.

6/29/77

NAME: NORTH TONAWANDA
COASTAL OPEN SPACE
AREA 6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: TONAWANDA ISLAND

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Tonawanda Island
- B. Location: City of North Tonawanda, Niagara County, New York.
The Island is located at the confluence of Tonawanda Creek and the east channel of the Niagara River. The actual boundary extends 100 feet seaward around the Island perimeter.
- C. Type: Industrial Redevelopment Area
- D. General Area Description: Tonawanda Island is a small flat island with heavy development mixed with vacant parcels of land. It is surrounded by the east channel of the Niagara River, Tonawanda Creek, and the Little River. Land uses on the Island include the former International Paper Company, International Filler Corporation, numerous marina facilities, railroad facilities and a municipal water filtration plant. In close proximity to the Island are the Cities of Lockport and North Tonawanda water intake stations.

Tonawanda Island is an ideal location for industrial development. The flat character of the Island, the availability of numerous transportation alternatives and a large labor base enhance the Island's industrial appeal.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. The Island is currently occupied by vacant land parcels and abandoned industrial structures. This has created poorly maintained land areas which create safety hazards as well as negative scenic appearance.
 - 2. The Island has a large amount of underutilized land. It is not realizing its potential as an industrial center.
 - 3. The current land use pattern on the Island is fragmented and disjointed. The unregulated industrial development of the Island prevents public access to the Niagara River. In addition, congregated docking facilities along the Little River seriously impair safe small craft movement in the channel.

4. In the event heavy industrial uses return to Tonawanda Island, the accompanying environmental problems should be addressed. This pertains to air and water pollution. The Cities of Lockport and North Tonawanda water intake stations are close to Tonawanda Island. Therefore, adequate effluent treatment methods must be sufficient to protect this resource.
5. The Buffalo Standard Metropolitan Statistical Area (SMSA) unemployment rate for September, 1976 is 9.1 percent. The International Paper Company recently closed the plant on Tonawanda Island, thus reflecting the major unemployment problem in the Erie-Niagara Counties region.
6. Tonawanda Island is an area of urban concentration where shoreline utilization and water uses are highly competitive.

B. Statewide Value

1. Due to the location at the confluence of Tonawanda Creek and the east channel of the Niagara River, the Island is a valuable scenic and aesthetic resource.
2. Due to the flatness of the land, waterfront location, and existing industrial structures, the Island is an important industrial location. Through the development of an industrial redevelopment plan for Tonawanda Island, the Riverfront area could integrate waterfront industry with recreational and other uses.

6/29/77

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COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: TONAWANDA CREEK/BARGE CANAL AREA

I. DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Tonawanda Creek/Barge Canal Area
- B. Location: The area is located at the confluence of Tonawanda Creek (Barge Canal) with the Niagara River and Little River. This includes land areas in the City of Tonawanda, Erie County, New York and the City of North Tonawanda, Niagara County, New York. A map identifying the GAPC boundaries is attached.
- C. Type: Marine Commercial/Open Space/Historic Area.
- D. General Area Description: Tonawanda Creek meets the Niagara River in the commercial center of the Cities of Tonawanda and North Tonawanda. The stream banks are defined by steel, concrete and asphalt walls. The Creek width is approximately 200 feet. It should be noted that the GAPC includes the confluence of Ellicott Creek with Tonawanda Creek and follows the former waterway to approximately the Delaware Avenue Bridge. Numerous street and railroad bridges cross the Creek/Canal at varying clearances above the water. The main land uses adjacent to the waterway are industrial and commercial enterprises. Such uses are not oriented toward the Creek/Canal and prohibit pedestrian access to the stream.

The Tonawanda Creek mouth represents the present day terminus of the Erie Canal. Although used mainly for recreational activities, commercial barge traffic is still evident on the waterway. In past years, the canal ran parallel to the Niagara River shoreline and turned inland at the present Niawanda Park in the City of Tonawanda. It then flowed through the City of Tonawanda and connected with Tonawanda Creek just east of the present Webster Street Bridge.

II. STATEWIDE INTEREST IN AREA

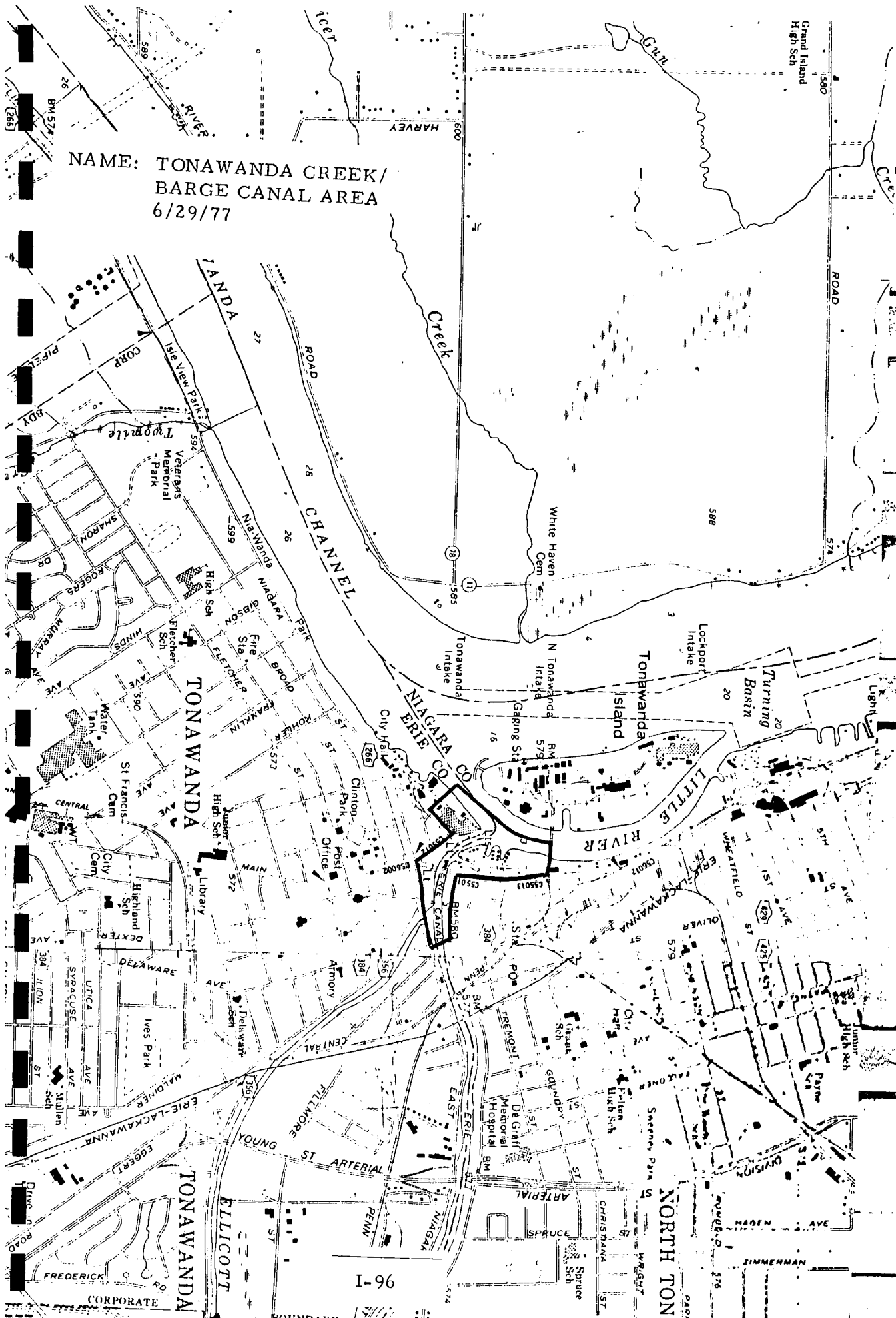
- A. Problems Facing Area
 - 1. The industrial/commercial land uses within the GAPC are not oriented toward the waterway. This hinders public access to the Creek/Canal and prohibits the full utilization of the Barge Canal as a historic/educational/economic resource.

B. Statewide Value

1. The GAPC location as the Erie Canal western terminus provides a unique historic resource to New York State.
2. New York State owns the channel and most of the canal banks. Therefore, New York State would have a direct interest in the proper management of those lands. In addition, the canal land within the GAPC is being evaluated for inclusion in the New York State Canal Park and Trail System.
3. The Creek/Canal is a navigable waterway and provides a recreational resource for numerous boaters travelling across the State.
4. Proper utilization of the area by the Cities of Tonawanda and North Tonawanda can increase the economic activity within the region. This would occur through a greater emphasis on the historic and recreational aspects of the area.
5. Current efforts by local officials and the Western New York Congressional delegation to obtain funding for a Barge Canal feasibility study would increase Statewide significance of the GAPC. Such a study would investigate the feasibility of increasing the water depth of the canal to permit large commercial vessels. This would increase the economic activity at the Barge Canal's western terminus.

6/29/77

NAME: TONAWANDA CREEK/
BARGE CANAL AREA
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: BEAVER ISLAND STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

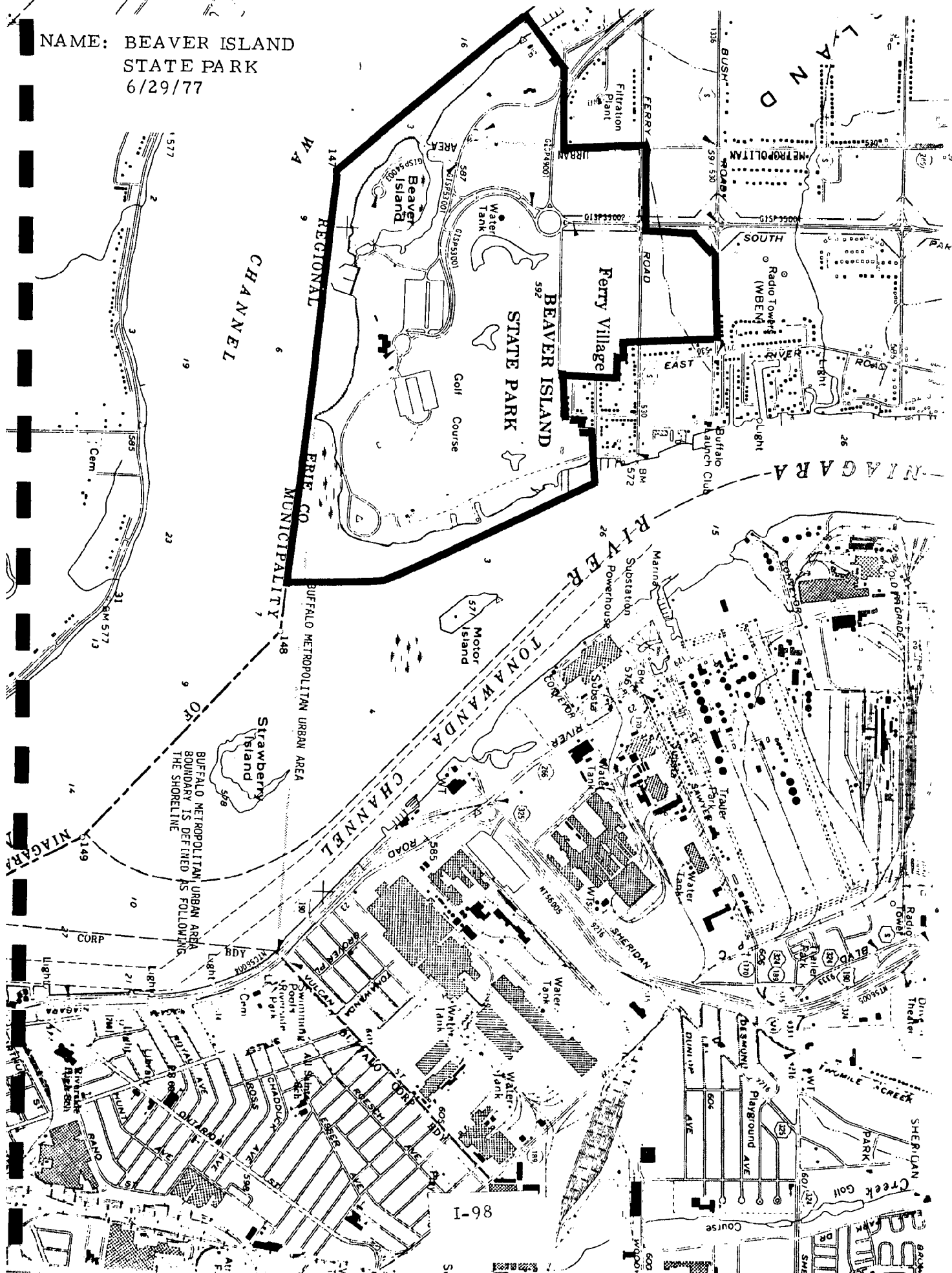
- A. Name: Beaver Island State Park
- B. Location: The Park is located on the southern tip of Grand Island, Erie County, New York. The actual GAPC boundary is the Park property lines. However, the boundaries extend to the International boundary line within the Niagara River.
- C. Type: State Park
- D. General Area Description: The Park is maintained by the Niagara Frontier State Parks Commission. It contains 1018 acres and provides swimming, fishing, boating, picnicking and golf facilities. A significant land feature within the Park is Beaver Island. This contains wooded areas and is divided from Grand Island by a shallow channel. The state park is well maintained and is used predominantly by Buffalo Metropolitan Area residents.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. New York State has recognized the value of Beaver Island State Park as an open space resource by acquiring the land for public recreation use.
 - 2. Due to the flat topography along the Niagara River shoreline, scenic points exist primarily in areas where the River suddenly changes character. Such a point occurs at Beaver Island State Park, where the River divides into the East and West Channels.
 - 3. The tremendous velocities of the Niagara River has negated any significant beach formation along the rivershore. However, sand deposits have created a small beach at Beaver Island State Park. This provides the only public beach on the Niagara River.

6/29/77

NAME: BEAVER ISLAND
STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: MOTOR ISLAND

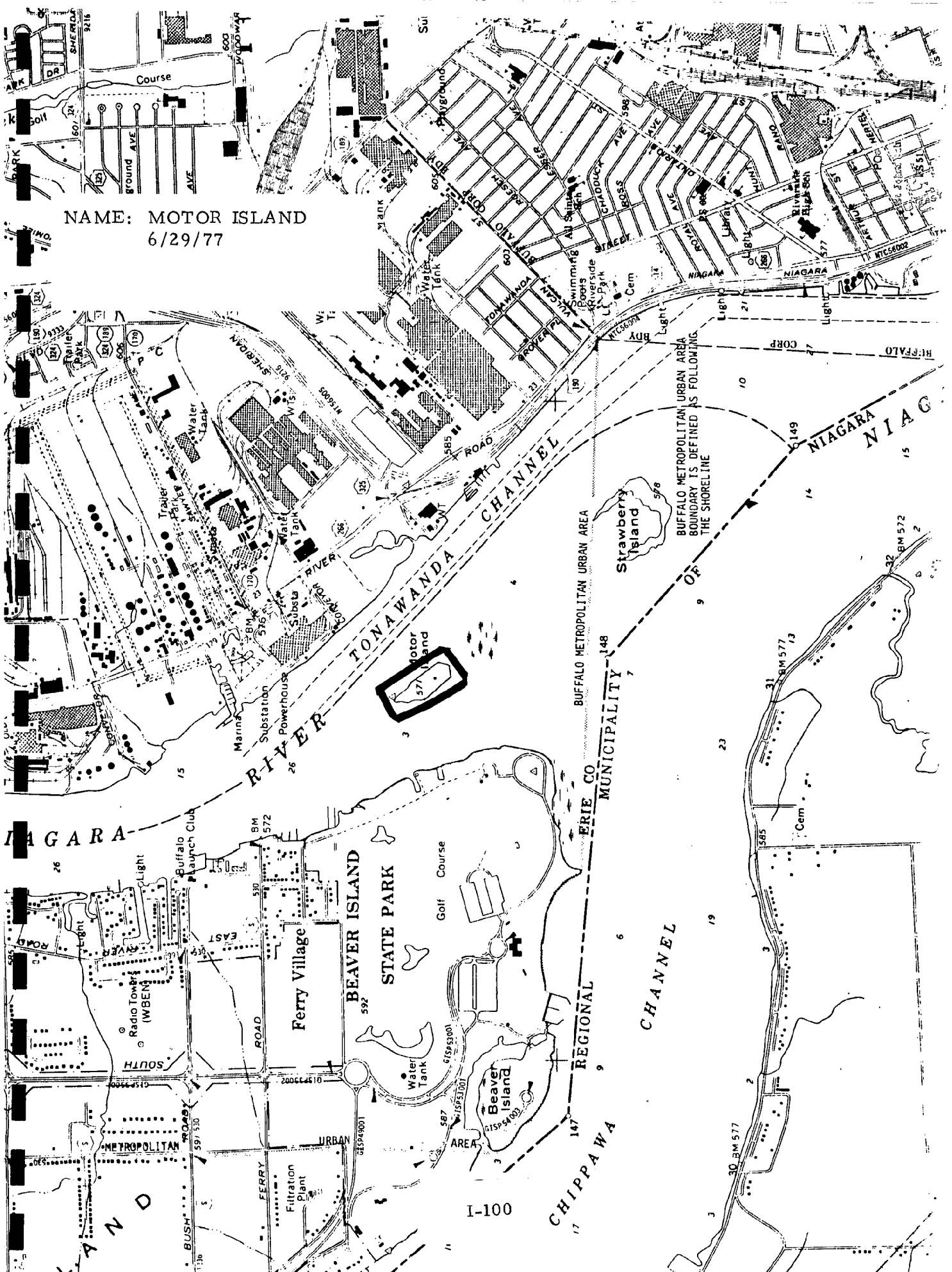
I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Motor Island
- B. Location: Motor Island is located 1200 feet off the southeast tip of Grand Island. It contains eight acres of land in a hexagonal formation. The island is situated within the municipal boundaries of the Town of Grand Island, Erie County, New York. The actual GAPC boundary is an imaginary line which encircles the Island and extends 100 feet seaward of the high water line on the Island shore.
- C. Type: Island/Fish Habitat
- D. General Area Description: The area is characterized by flat and marsh land with numerous poplar trees dispersed throughout the Island. In past years, Motor Island has been occupied by a ferry landing and tavern, yacht club and a private summer resort. It is currently undeveloped and contains the remnants of an old clubhouse and tennis courts.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. The Niagara River adjacent to Motor Island is a valuable fish spawning area for the muskellunge species. Preservation of the Island as a natural area with limited recreational use will aid in maintaining the Island as a fish breeding site.

6/29/77



NAME: MOTOR ISLAND
6/29/77

BUFFALO METROPOLITAN URBAN AREA
BOUNDARY IS DEFINED AS FOLLOWING
THE SHORELINE

ERIE CO
MUNICIPALITY

REGIONAL
CHIPPAWA

BEAVER ISLAND
STATE PARK

FERRY VILLAGE

CHANNEL

I-100

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: BUCKHORN ISLAND STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Buckhorn Island State Park
- B. Location: The Park is located on the north end of Grand Island, Erie County, New York and is bisected by the N. Y. S. Thruway. It is within the Town of Grand Island municipal limits and is situated at the northern junction of the east and west channels of the Niagara River. The actual GAPC boundary is the State Park property line. However, the boundary extends to the International boundary line and the Erie County/Niagara County boundary within the Niagara River.
- C. Type: State Park/Wetland
- D. General Area Description: Buckhorn Island State Park contains 896 acres of wetland marshes. It functions as a bird nesting area as well as a way-station for migrating waterfowl. Burnt Ship Creek traverses the Park in an east-west direction and is bordered by wooded wetlands as well as forested areas.

The major land use within the Park is the New York State Thruway. The thoroughfare bisects Buckhorn State Park into an east and west section. Land uses surrounding the GAPC include low density residential areas as well as undeveloped property.

II STATEWIDE INTEREST IN AREA

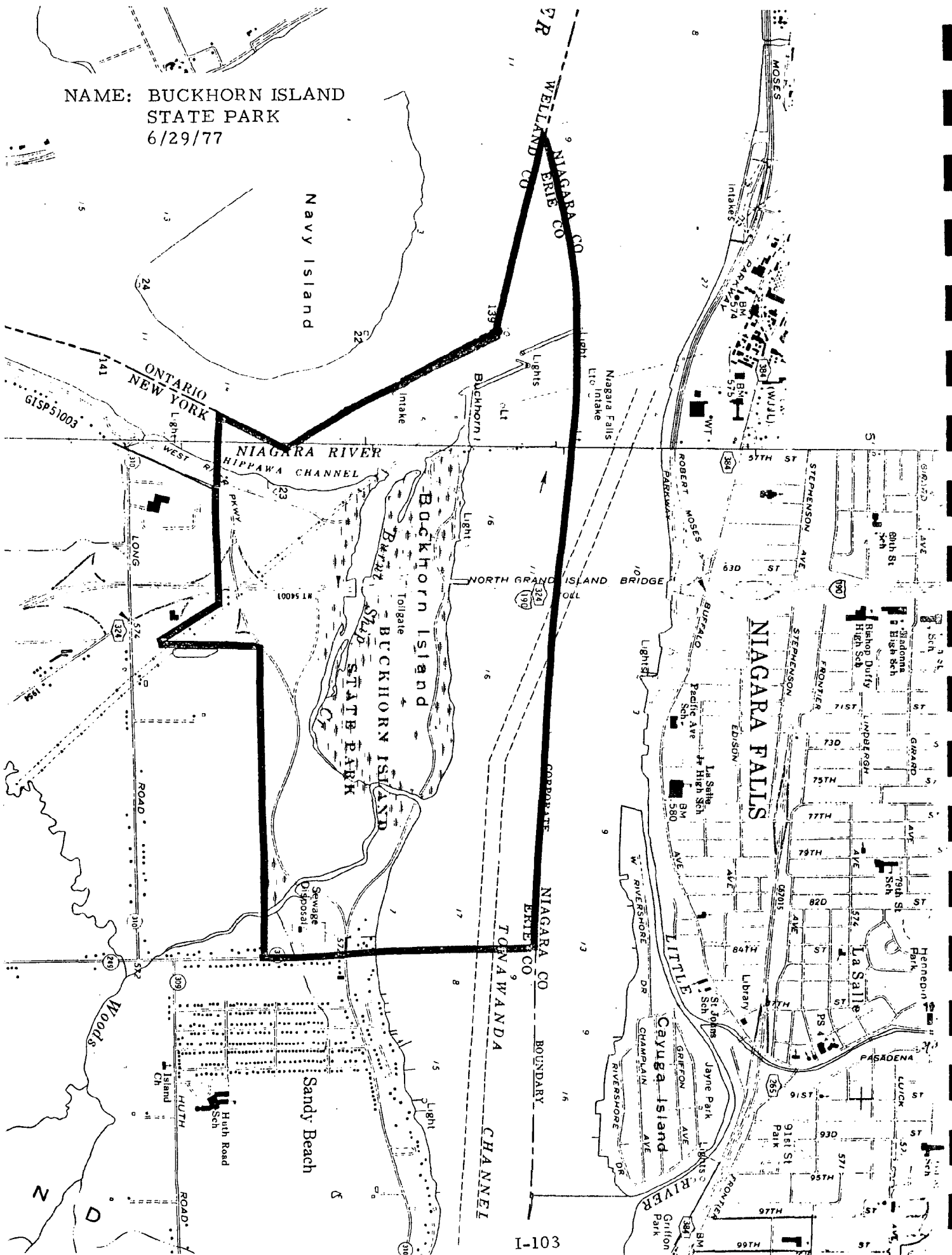
- A. Problems Facing Area
 - 1. The land uses (i. e. limited access highway, power line extensions) within Buckhorn Island State Park are incompatible with the natural environment of the area.
- B. Statewide Value
 - 1. New York State has recognized the value of Buckhorn Island State Park as an open space resource by acquiring the land for public preservation.

2. The area is the largest ecological preserve along the Niagara River shoreline. It provides a valuable habitat for various bird/wildlife species and is a way-station for migrating water-fowl.
3. The natural resources evident on Buckhorn Island provide valuable education opportunities for New York State residents. The nature trails within the Park attract approximately 60,000 visitors per year.*

*Source: Erie and Niagara Counties Regional Planning Board Adopted
Niagara River Environmental Plan (1975)

6/29/77

NAME: BUCKHORN ISLAND
STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: STRAWBERRY ISLAND

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Strawberry Island
- B. Location: The Island is situated within the Niagara River just off the southern tip of Grand Island. It is within the municipal boundary of the Town of Tonawanda, Erie County, New York. The actual GAPC boundary is an imaginary line encircling the Island 100 feet seaward of the highwater mark on the east, west and south shore of the Island. The north shore of Strawberry Island forms a horseshore with a water inlet dividing the shore into two extended points. Therefore, the GAPC boundary along the north shore will be an imaginary line extending 100 feet seaward of the high water mark at the two horseshoe points. Thus, the entire water inlet is within the GAPC boundary line.
- C. Type: Island/Fish Habitat
- D. General Area Description: The Island is in the shape of a small horseshoe and is approximately 10 acres. This acreage is subject to slight variation due to water level and rate of erosion. It is an undeveloped natural open space area and wildlife sanctuary with the potential for limited recreational use.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. The major problem present on Strawberry Island is erosion. which threatens its existence. Of particular concern is determining the best method for preventing erosion thus preserving the Island.
- B. Statewide Value
 - 1. Natural Habitat - The Island is a natural habitat for many forms of wildlife, especially various species of fish, and is an essential natural muskellunge hatchery.

2. Historic, Cultural, Scenic - The Island is of great historic, scenic and cultural value to the area residents on both the American and Canadian sides of the Niagara River.
3. Geological - Strawberry Island is also the geologic dividing point of the Niagara River into East and West branches around Grand Island. It is therefore a primary influence on river current and flow direction at that point, and significantly affects the characteristics of the river and shoreline downstream.

6/29/77

6/29/77

I-106

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: ISLE VIEW PARK AND EXTENSION

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

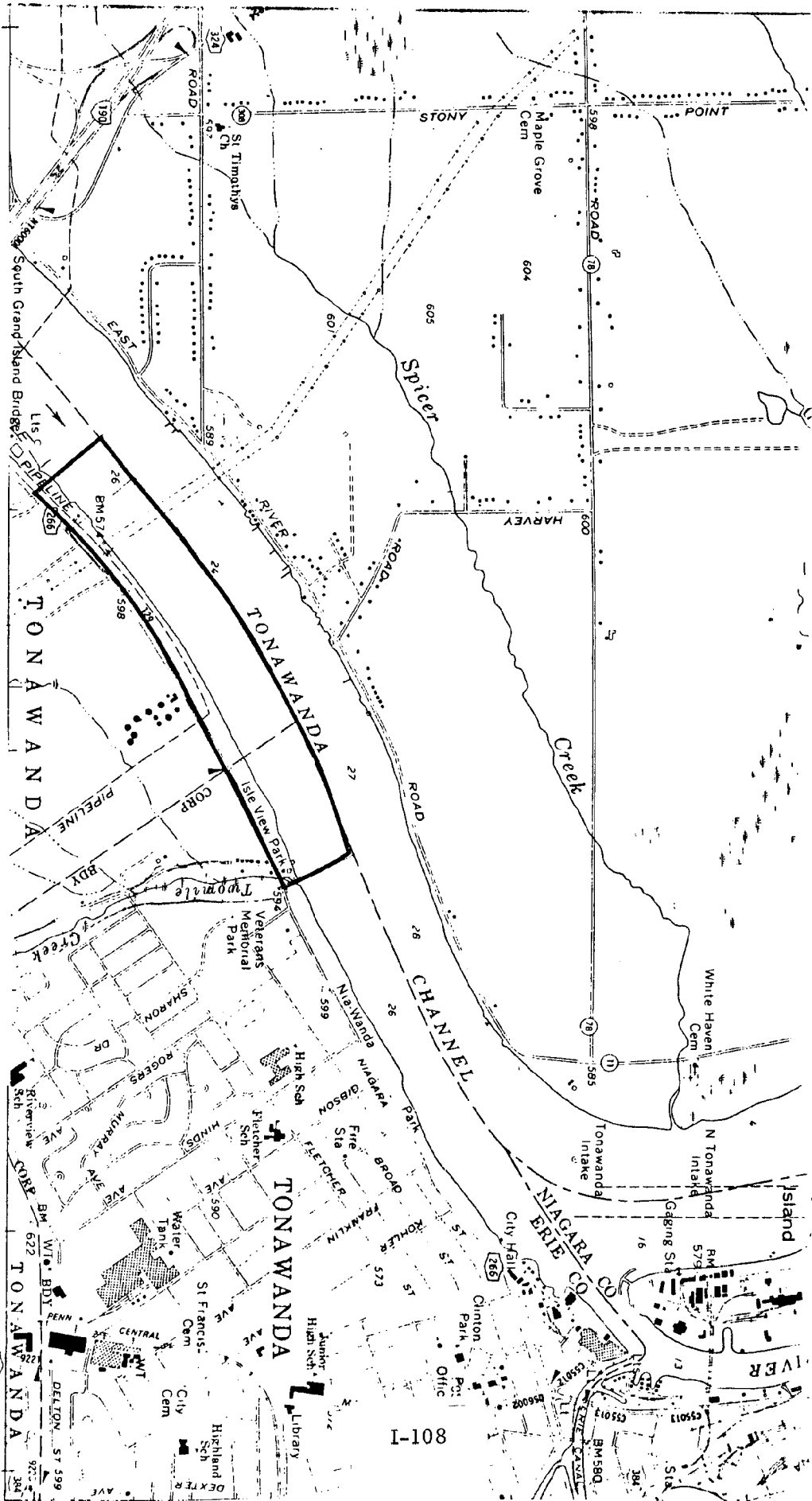
- A. Name: Isle View Park and Extension
- B. Location: The park is a 49 acre linear facility along the east branch of the Niagara River in the City of Tonawanda and Town of Tonawanda, Erie County, New York. The actual GAPC boundary is indicated on the attached map.
- C. Type: Park
- D. General Area Description: The riverfront property is partially developed (i.e. 7 acres) as a recreational resource. Erie County owns the full linear strip and has future plans for full development. Such plans include fishing, expansion of docking facilities as needed, picnic facilities and special attention to a nature study trail along the old Erie Canal Towpath. It should be noted that the Park is currently used for power boat races on the River.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. The land offers substantial recreation value and is situated in an area of significant industrial and residential development. Therefore, protection of the parkland is needed from competing land uses.

6/29/77

NAME: ISLE VIEW PARK AND EXTENSION
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: TWO-MILE CREEK CORRIDOR

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

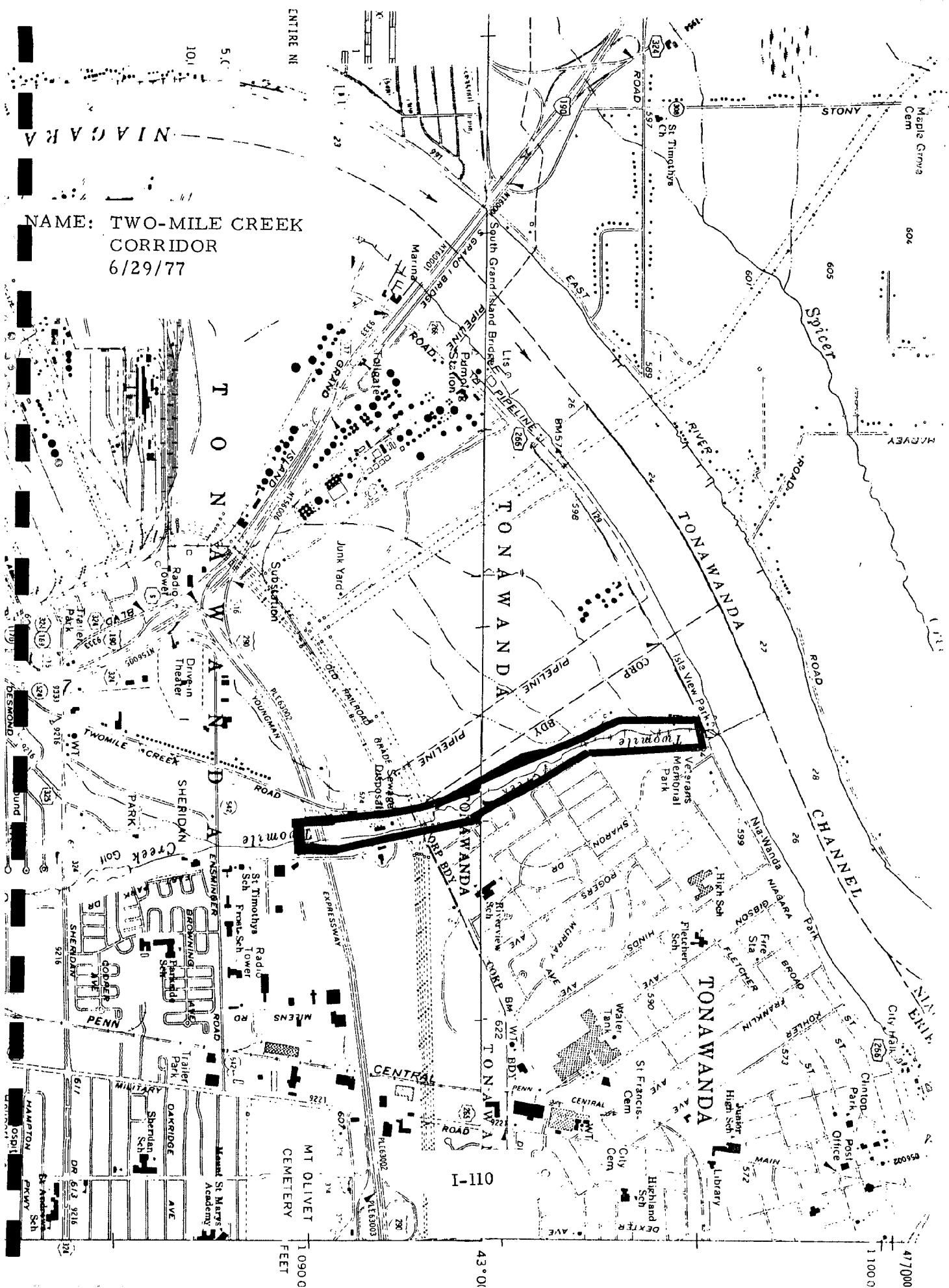
- A. Name: Two-Mile Creek Corridor
- B. Location: The GAPC is situated within the City of Tonawanda and Town of Tonawanda, Erie County, New York municipal boundaries. Reference should be made to the attached map for a detailed site location.
- C. Type: Open Space Corridor
- D. General Area Description: The corridor extends from Isle View Park and from Niawanda Park in the City of Tonawanda southward for about 13 miles to a connection with Sheridan Park in the Town of Tonawanda. The area is primarily vacant with a few structures scattered along the Creek. Erie County plans on widening Two-Mile Creek Road which parallels the Creek and installing 1.5 miles of continuous bike path as part of a linear open space improvement project. An additional 10.2 acre linear open space facility is being planned by Erie County within the site.

The surrounding land uses include a single family residential subdivision east of the Creek with industrial uses west of the corridor. It should also be noted that the Town of Tonawanda Sewage Treatment Plant is being constructed in close proximity to the GAPC site. The latter has been identified as a regional facility through Task 8.10 of the second year ENCRPB Coastal Zone program.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. Industrial runoff from adjacent industries has caused water quality problems within Two-Mile Creek. Such runoff eventually reaches the Niagara River and contributes to the pollution of that water body.
- B. Statewide Value
 - 1. The GAPC provides an excellent public access corridor between the Niagara River and the urbanized areas within the Town of Tonawanda.

NIAGARA



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: BETHLEHEM STEEL OFFSHORE DIKED DISPOSAL AREAS

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Bethlehem Steel Offshore Diked Disposal Area
- B. Location: Erie County, City of Lackawanna, Lake Erie Shoreline and offshore underwater lands.

Proposed diked disposal areas would encompass approximately 600 acres of primarily offshore underwater lands located to the north and south of Smokes Creek at its confluence with Lake Erie.

- C. Type: Industrial Area/Economic Development
- D. General Area Description: The Bethlehem Steel Corporation is a major industry in the Buffalo metropolitan area. Steel production processes result in large build-ups of slag residue which necessitate disposal. An environmentally sound and economically feasible method of constructing underwater dike disposal areas for the slag has been studied by Bethlehem Steel. The U.S. Army Corps of Engineers is now completing construction of a disposal area adjacent to the northern portions of the proposed Bethlehem site.

II STATEWIDE INTEREST IN AREA

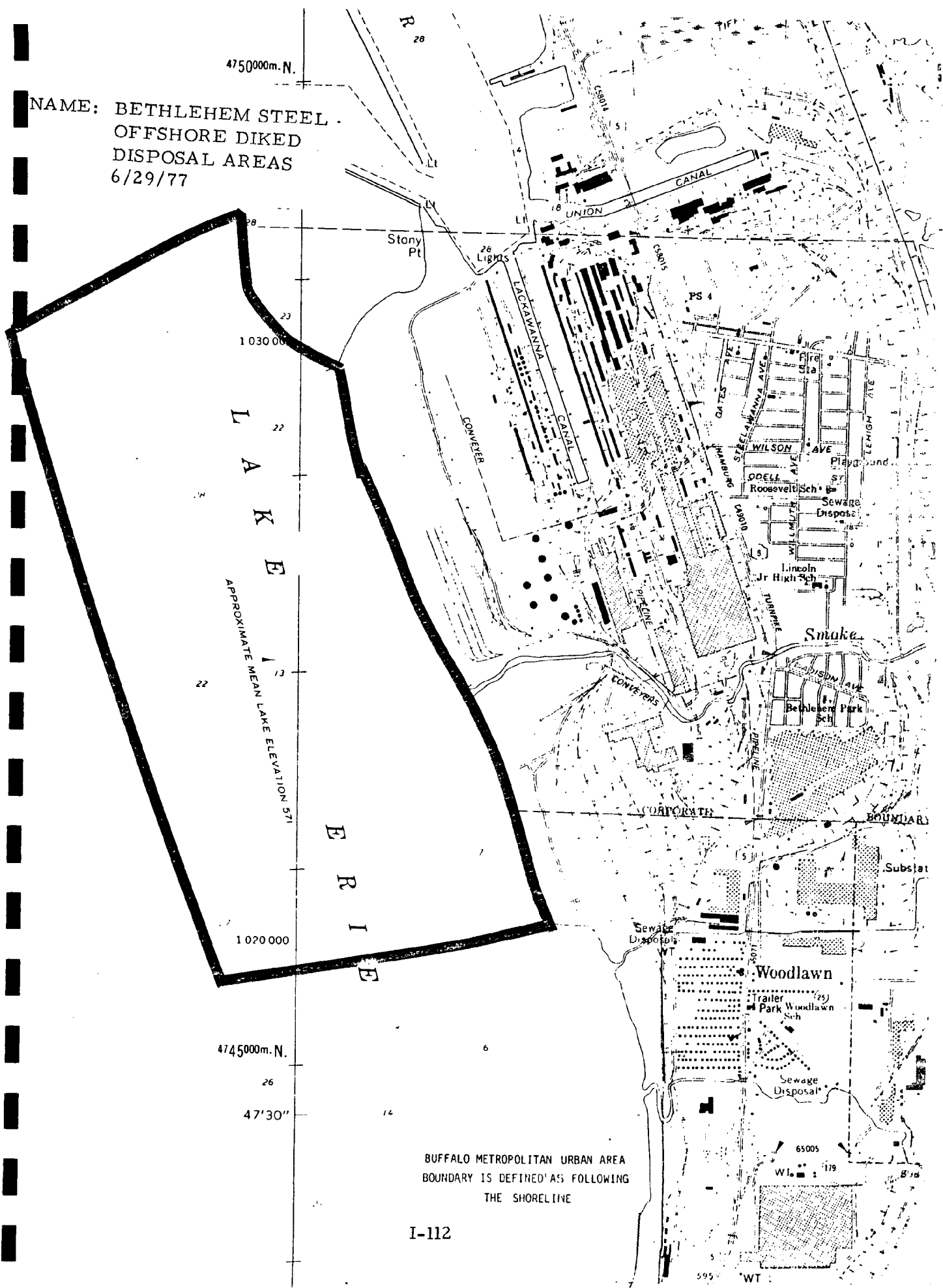
A. Problems Facing Area

1. Land slag build-up could become unsightly and cause negative environmental impacts particularly if the Woodlawn Beach site is developed.

B. Statewide Value

1. Provision of incentives for industry to remain in New York State are important.
2. Assistance to Bethlehem Steel in furthering the use of the diked disposal concept to meet its manufacturing needs, would exemplify an intent to provide positive incentives for industrial expansion.

NAME: BETHLEHEM STEEL
OFFSHORE DIKED
DISPOSAL AREAS
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: WOODLAWN BEACH

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Woodlawn Beach
- B. Location: Erie County, Town of Hamburg (80 acre shoreline site).
About six miles from downtown Buffalo (6,000 lineal feet front).
- C. Type: Park/Recreation Area - projected special purpose waterfront park.
- D. General Area Description: Development of Woodlawn Beach provides an opportunity to maximize recreation potential and preserve a unique shoreline area in an urban location. Deterioration of the site has occurred since its peak period as a recreation area in the 1910's and 1920's.

A high quality natural sand beach with related swimming activities can provide recreational opportunities in an urban area. At present, the closest comparable park/beach facilities is Wendt Beach, 12 miles away.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area

- 1. Development of this area for recreational use is a high priority since access and use of lakefront property is a rapidly diminishing resource in Erie County.
- 2. The scenic natural sand beach area is deteriorating.
- 3. There is presently a need for additional beach front recreational opportunities within the bi-county region.

B. Statewide Value

- 1. The New York State "Comprehensive Recreation Plan" - People Resources-Recreation, September 1972 recommends preservation of open space along the Great Lakes be a major objective of public recreation programs. Development of Woodlawn Beach would support this policy by preserving a shoreline area, providing recreational opportunities and preserving high quality natural sand beach.

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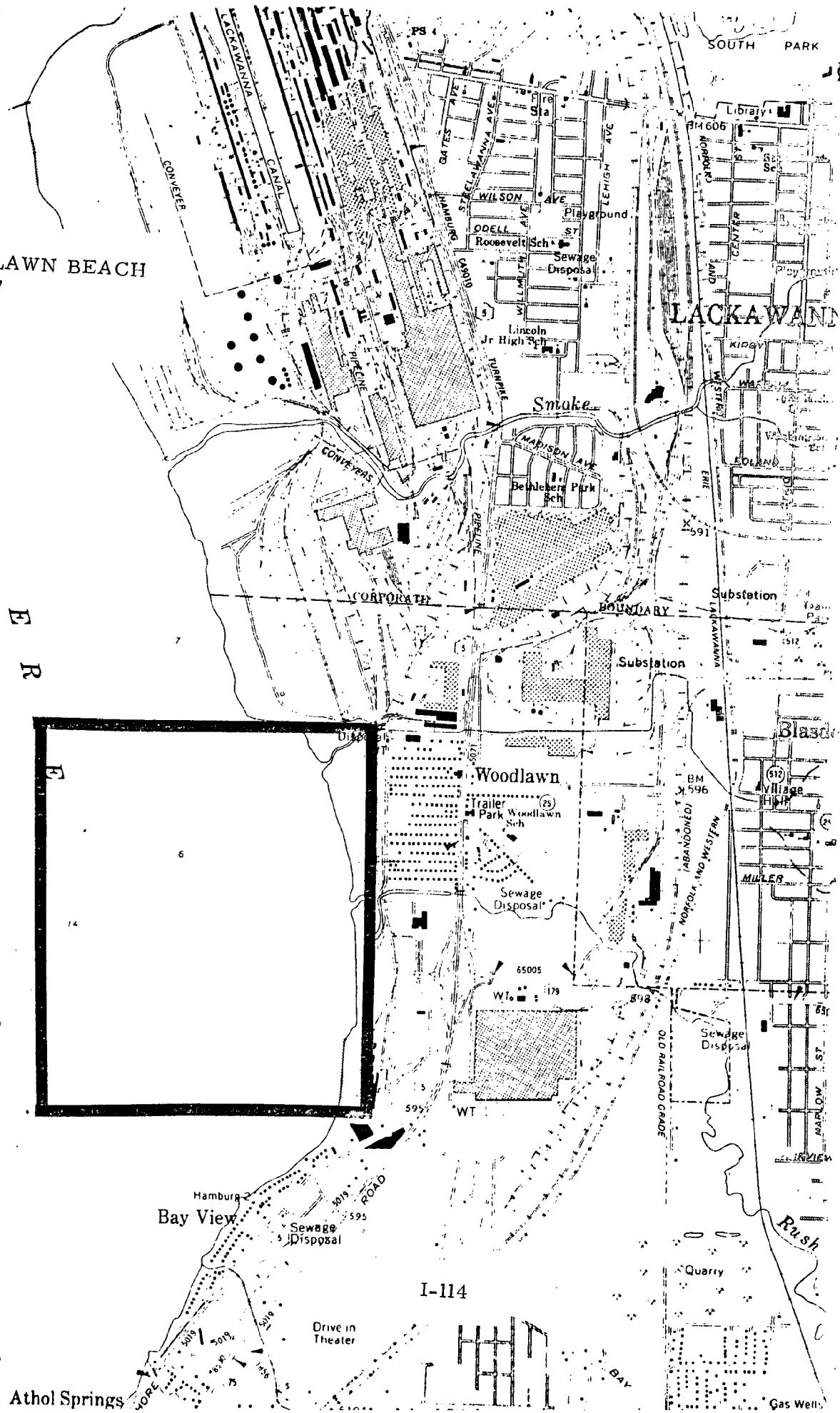
NAME: WOODLAWN BEACH
6/29/77

PROXIMATE MEAN LAKE ELEVATION 571
22
1 020 000

4745000m. N.

26
47'30"

1 010 000



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: SENECA SHOALS

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

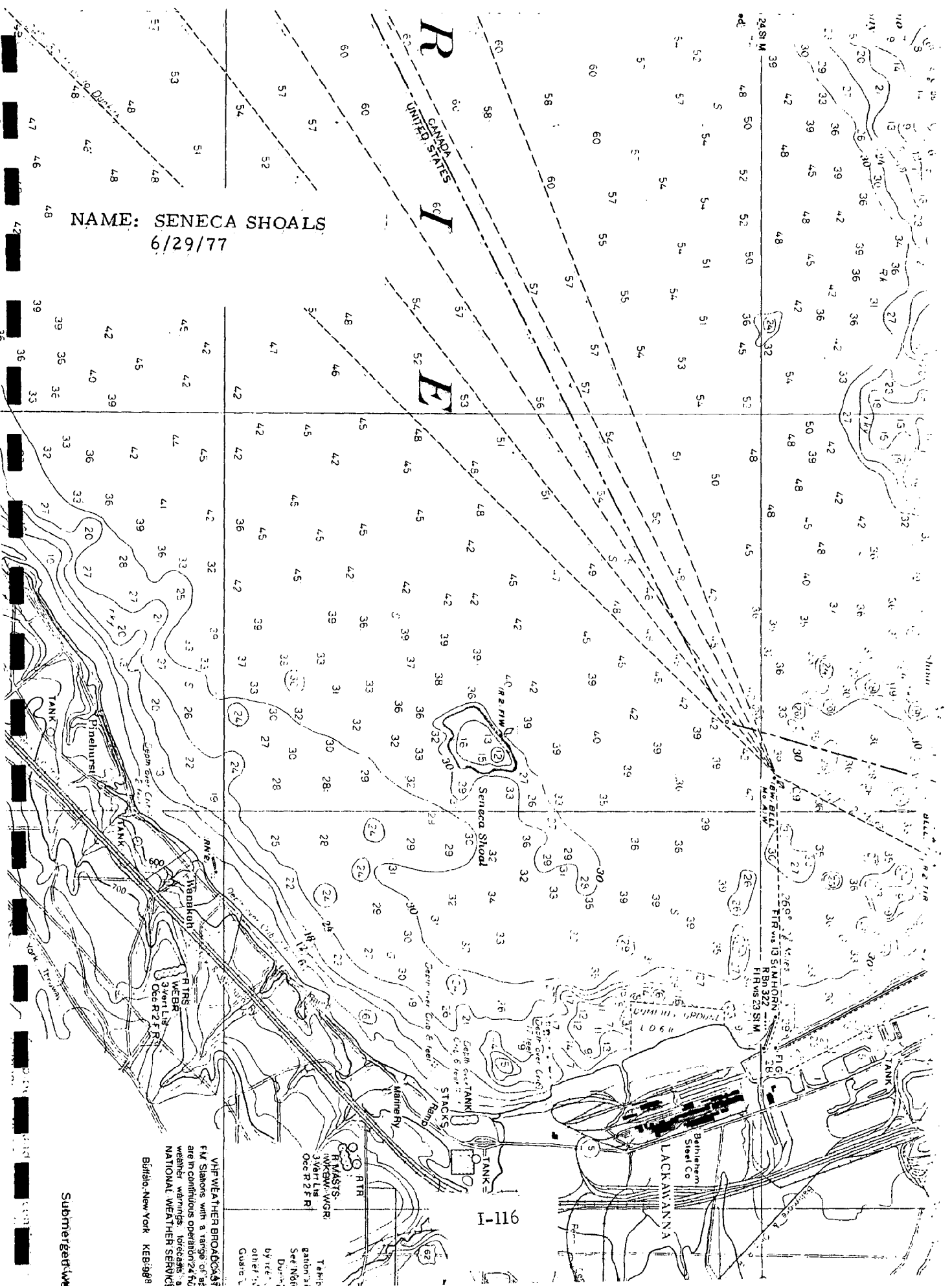
- A. Name: Seneca Shoals
- B. Location: Located in Lake Erie at 42° 47' Latitude and 78° 56' Longitude.
- C. Type: Fish/Wildlife Habitat
- D. General Area Description: Seneca Shoals is located approximately four miles off the Town of Hamburg shore. The shoals is an important sport fishing area. Their depth average 12-15 feet. The shoals are marked by a navigational buoy as a shipping hazard. The GAPC boundary coincides with the 24' depth contour.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. The possibility of damaging the fish habitat exists with any natural gas exploration program. Regulations to protect the fisheries resource should be instituted.
- B. Statewide Value
 - 1. Lake Erie has been recognized as a major recreational and commercial resource. The Lake functions as a major commercial fishery.

In addition, New York State is conducting a salmonid stocking program within Lake Erie. Such commercial and recreational fishing opportunities in Lake Erie warrant protection of the prime fishing areas.

6/29/77



NAME: SENECA SHOALS
6/29/77

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VHF WEATHER BROADCAST
FM Stations with a range of 25
are in continuous operation 24 hr
weather warnings, forecasts, and
NATIONAL WEATHER SERVICE
Buffalo, New York KEB-988

Submerged wre

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WKSW-
OCC 25 F R

Baltimore
Steel Co
LACKAWANNA

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: EIGHTEENMILE CREEK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Eighteenmile Creek
- B. Location: The lower reach of the creek to its confluence with Lake Erie is located in the Towns of Hamburg and Evans, Erie County, New York. The landward boundaries of the GAPC extend along the top of the gorge cliffs within the creek corridor from Lake Erie to Old Lake Shore Road. The boundaries also extend one mile from the creek confluence into Lake Erie.
- C. Type: Open Space Corridor
- D. General Area Description: The Eighteenmile Creek is unique as an area of scenic beauty and geological significance with fossil formations dating back 400 million years. Little scientific exploration has been done. Thus many other valuable historic remains are possible. Development of the area has been limited until recently.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area

- 1. A means of managing and preserving this area to protect its environmental beauty, and preserving its historic geologic importance should be developed in consideration of possible encroaching public uses. The area's natural assets have already attracted urban types of development as well as visitors into the gorge area.

B. Statewide Value

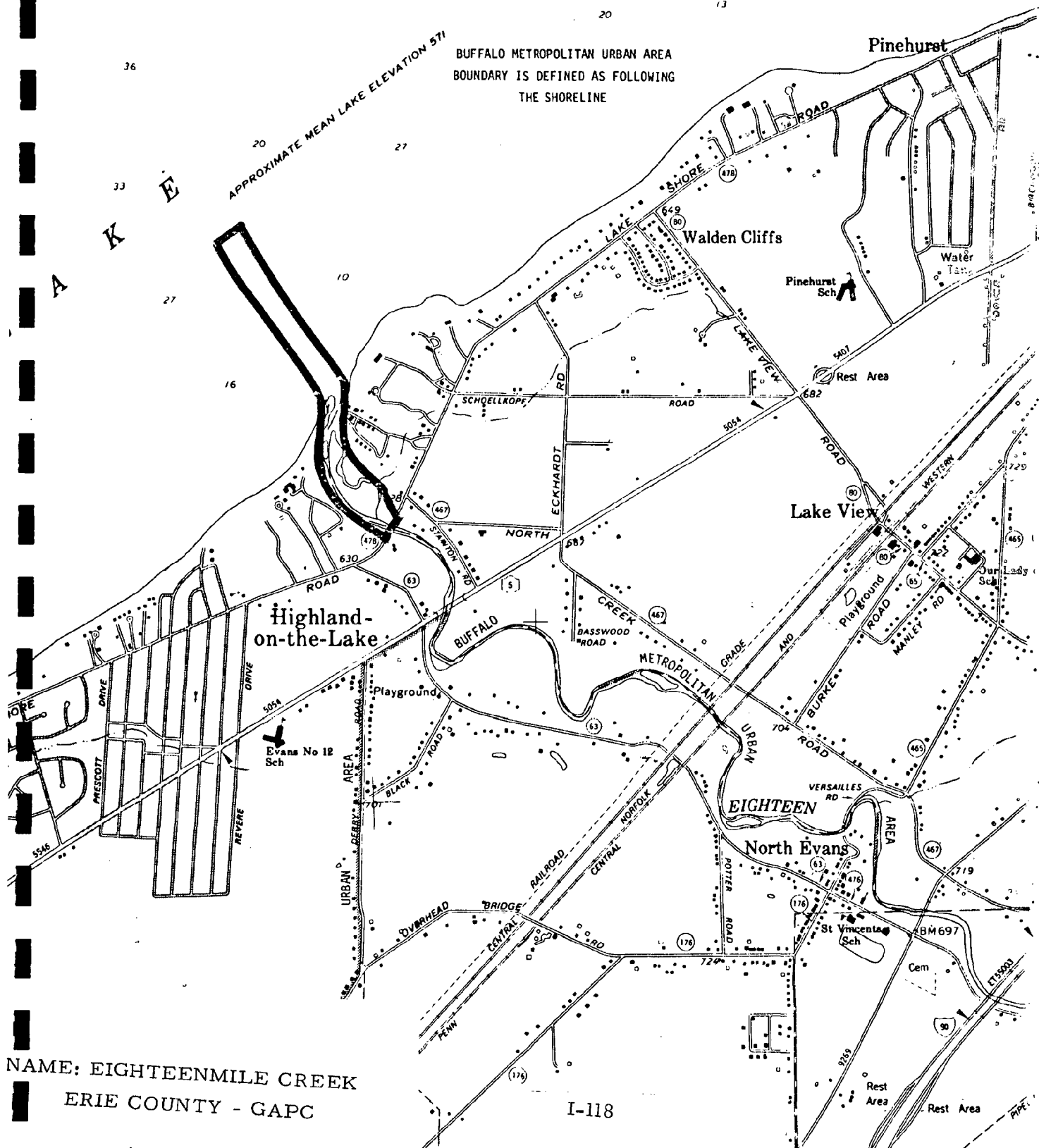
- 1. Eighteenmile Creek area provides a scenic open space resource of unique world-wide geological significance. Given proper management and protection from competing urbanizing land uses, the area can provide natural and educational/recreational resources.

NAME: EIGHTEENMILE
CREEK
6/29/77

E R I E

APPROXIMATE MEAN LAKE ELEVATION 571

BUFFALO METROPOLITAN URBAN AREA
BOUNDARY IS DEFINED AS FOLLOWING
THE SHORELINE



NAME: EIGHTEENMILE CREEK
ERIE COUNTY - GAPC

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: STURGEON POINT

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Sturgeon Point
- B. Location: Along Lake Erie shoreline in Town of Evans, Erie County
45 acres land, 35 acres water.
- C. Type: Park/Recreation Area - projected special purpose waterfront park
- D. General Area Description: Sturgeon Point encompasses about 1,600 feet of Lake Erie shoreline area. It provides a small protected boat marina and there is some beach area although future development does not include a bathing beach function because of nearby Wendt Beach. Principal recommended uses for the park include waterfront activities with picnic facilities to complement the existing marina.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area

- 1. Development of this area for recreational use is a high priority since access and use of lakefront property is a rapidly diminishing resource in Erie County. Loss of excellent fishing grounds and boating opportunities could result from uncontrolled development.

B. Statewide Value

- 1. The New York State "Comprehensive Recreation Plan" - People, Resources-Recreation, September, 1972, recommends preservation of open space along the Great Lakes be a major objective of public recreation programs. The Sturgeon Point Park area should support this policy by preserving a shoreline area and providing recreational opportunities. In addition, the area includes excellent fishing grounds and provides a small boat marina. Some possibility exists for provision of a protected harbor of refuge at Sturgeon Point, however, cost estimates indicate other locations would be more feasible.

6/29/77

NAME: STURGEON POINT
6/29/77

6/29/77

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APPROXIMATE MEAN LAKE ELEVATION 572

Sturgeon
Point

LARKIN ROAD

NO 31

Reserve

Plans

LAKE

I-120

22

COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: BIG SISTER CREEK (MOUTH) AND LITTLE SISTER CREEK (MOUTH)

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Mouth of Big Sister Creek and Little Sister Creek
- B. Location: The GAPC is situated along the Lake Erie shoreline in the Town of Evans, Erie County. The preliminary GAPC boundary follows the 100 year floodplain along the Lake Erie shoreline as designated in the preliminary HUD Flood Hazard maps. It also extends one mile seaward of the creek mouths.
- C. Type: Floodplain
- D. General Area Description: The area surrounding the mouth of Big Sister Creek has been identified as a Department of Housing and Urban Development (HUD) Special Flood Hazard Area. Buffalo Municipal Park is located at the Creek's mouth. This area also is in close proximity to the Wendt Beach Park area now being proposed for development by Erie County.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area

- 1. Floodplain areas such as Big Sister Creek and Little Sister Creek should not be commercially or residentially developed due to adverse economic and social effects that can be caused by water damage. Controlled development should put primary emphasis on recreational activities and maintenance of open space areas.

B. Statewide Value

- 1. Limiting structural development at the mouth of Big Sister Creek and Little Sister Creek as well as placing priority on open space and recreational uses is supportive of New York State's open space preservation priority for Lake Erie. The area would be compatible and support recreational opportunities provided by Wendt Beach's development.

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NAME: BIG SISTER CREEK (MOUTH)
AND LITTLE SISTER CREEK
(MOUTH)
6/29/77
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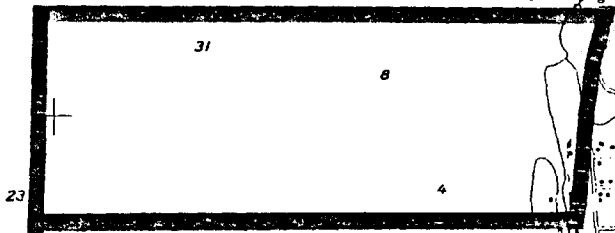
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23

Buffalo Municipal
Bathing Beach

Filtration Plant

St Vincent de Paul
Camp

22

20

30

13

11

14

Angola-on-the-Lake

Buffalo
Fresh Air Mission

Evans Beach
Tunnel

Grandview
Bay

Grandview
Bay

Grandview Bay
Golf Course

Camp
Pioneer

I-122

2

LAKE LEST
ROAD

Reservoir

BEECHWOOD
ROAD

LARKIN ROAD

STURGEON NEW HAVEN ROAD

POINT

Gas Wells

650

648

Water

APPROX BOUNDARY

COUNTY PARK

(127)

(148)

596

ROAD

(148)

(183)

Swimming

Camp
Lakeland

(148)

LAKE

SHORE

(96)

BENNETT

(96)

PARK

(96)

Big

Sister

ROAD

(599)

610

ROAD

(96)

Trailer Park

(15)

(322)

Evans Center

(322)

Creek

(322)

ROAD

(661)

(223)

Lake Shore

Central High Sch

(322)

Gas Well

(322)

Standpipe

(322)

Drive-in Theater

(322)

Trailer Park

(322)

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COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: WENDT BEACH

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

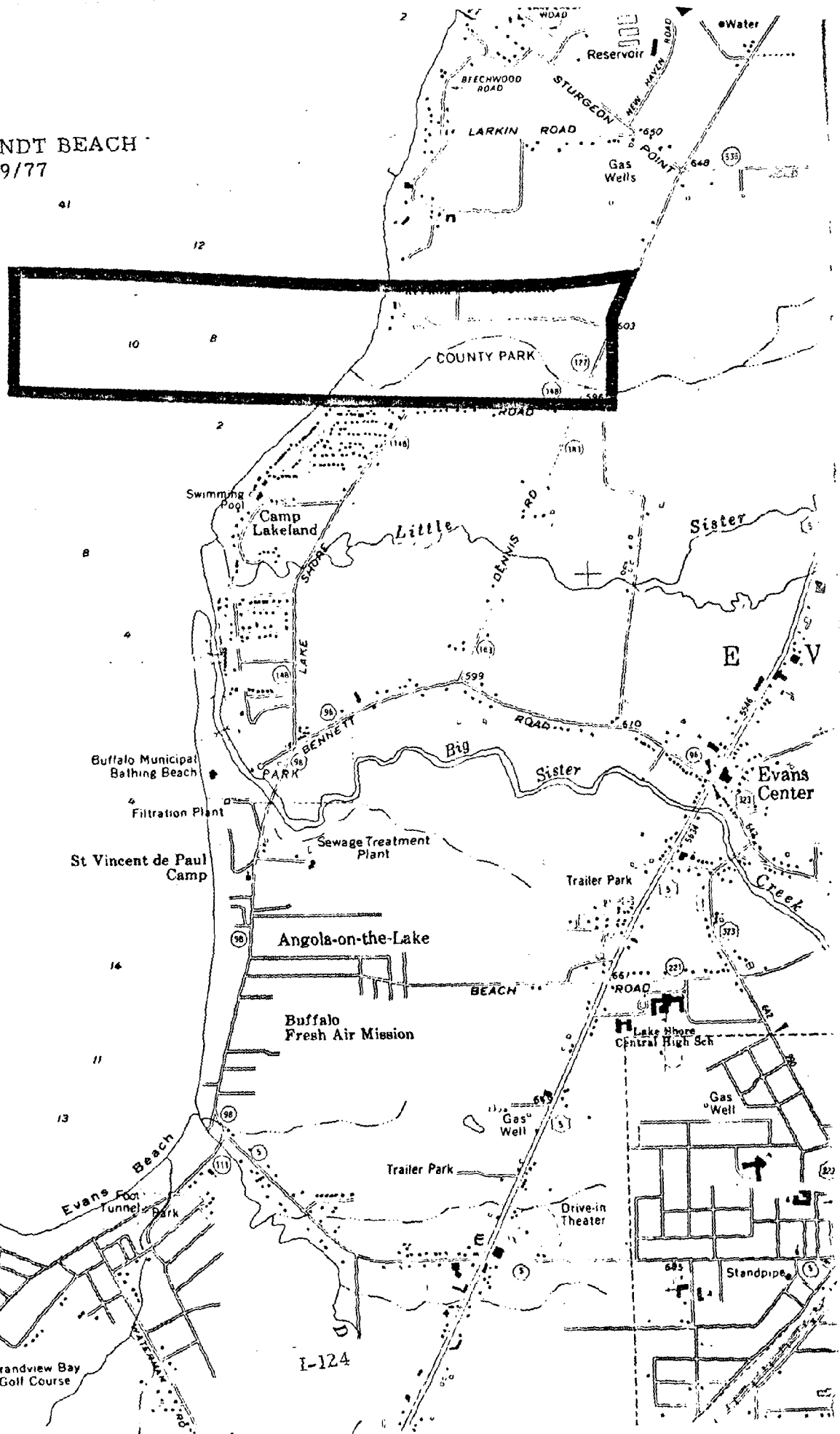
- A. Name: Wendt Beach
- B. Location: Along Lake Erie shoreline in Town of Evans, Erie County (177.5 acres)
- C. Type: County Park/Recreation Area - (projected special purpose waterfront park)
- D. General Area Description: Wendt Beach provides one of the best sandy beaches on the Lake Erie waterfront in Erie County - a beach 2,158 feet in length and approximately 150 feet deep at average water height. A high wall of sand dune approximately 100 feet in width abuts the sand beach. A staged development for Wendt Beach is planned with major emphasis on swimming (public beach use).

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area
 - 1. Development of this area for recreational use is a high priority since access and use of lakefront property is a rapidly diminishing resource in Erie County. Erosion from high waters must be controlled in order to prevent further deterioration of the beach and dune area which are of high quality.
- B. Statewide Value
 - 1. The New York State "Comprehensive Recreation Plan" - People-Resources-Recreation, September 1972, recommends preservation of open space along the Great Lakes be a major objective of public recreation programs. Development of Wendt Beach would support this policy by preserving a shoreline area, providing recreational opportunities and preserving a scenic shoreline sand dune area.

6/29/77

NAME: WENDT BEACH
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: EVANGOLA STATE PARK

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

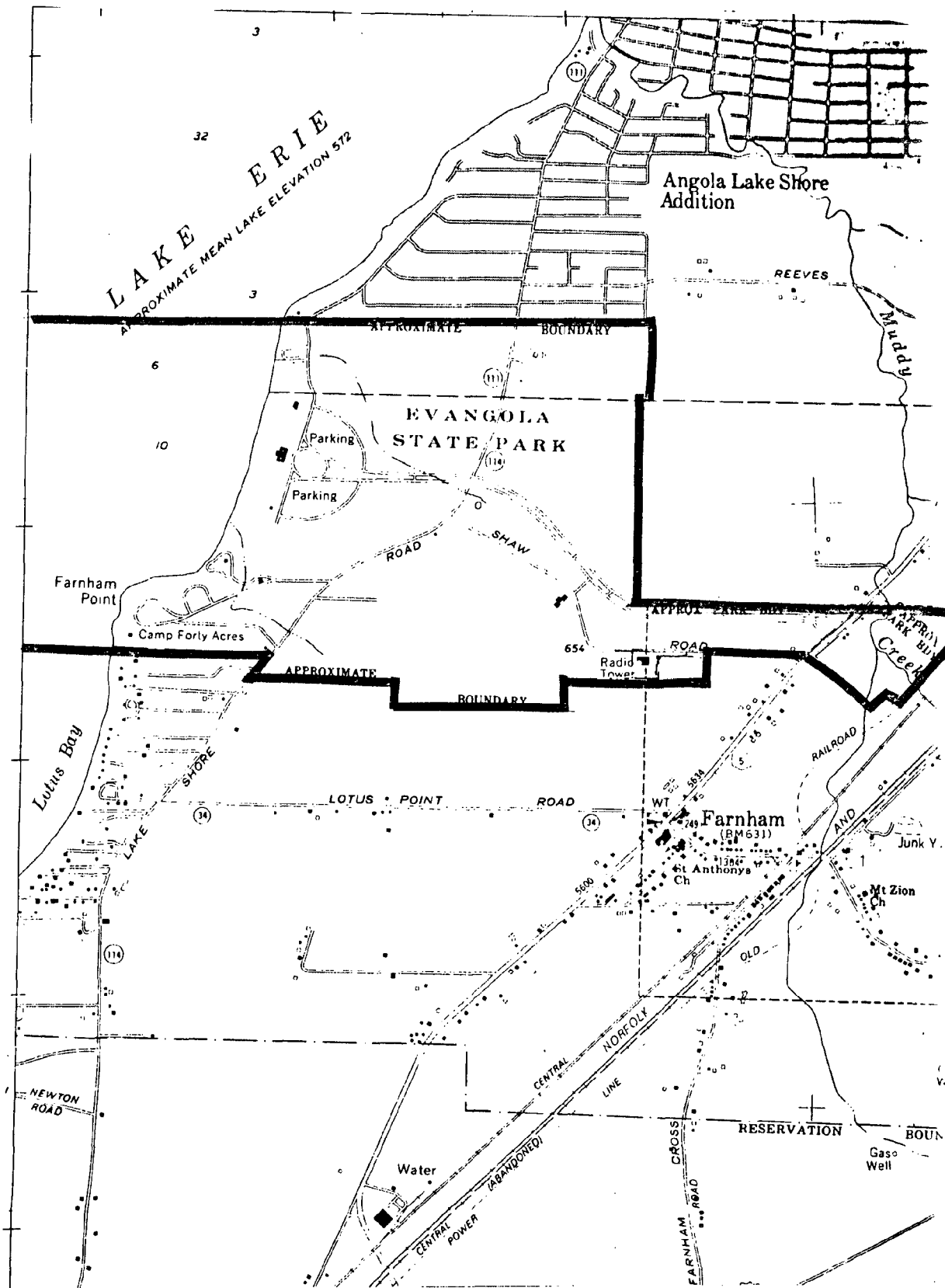
- A. Name: Evangola State Park
- B. Location: The Park is located adjacent to Lake Erie in the Town of Evans, Erie County. It is approximately thirty (30) miles south of the City of Buffalo southern municipal line. The actual GAPC boundaries follow the State Park property lines with the western boundary extending one mile seaward of the high water mark in Lake Erie. Reference should be made to the attached map for a more detailed site location.
- C. Type: Park
- D. General Area Description: The Park consists of 733 acres and provides numerous recreation opportunities. These include swimming, picnicking, camping and athletic sports. A significant feature of the GAPC is a natural sand beach approximately 400 feet long. This is one of the few public beach bathing areas along Lake Erie in Erie County.

II STATEWIDE INTEREST IN AREA

- A. Problems Facing Area: There are no major problems currently present at the GAPC site.
- B. Statewide Value
 - 1. New York State has recognized the value of Evangola State Park as an open space resource by acquiring the land for multi-recreation use.
 - 2. The Park provides a public beach along Lake Erie for New York State residents. Currently, the Park is the only State recreation facility adjacent to Lake Erie, within Erie County.

6/29/77

NAME: EVANGOLA STATE PARK
6/29/77



COASTAL ZONE MANAGEMENT
GEOGRAPHIC AREAS OF PARTICULAR CONCERN

NAME: COASTAL WATER BODIES

I DESCRIPTION OF GEOGRAPHIC AREA OF PARTICULAR CONCERN
(GAPC)

- A. Name: Coastal Water Bodies (i.e. Lake Erie, Niagara River, Lake Ontario)
- B. Location: The water bodies form the northwestern boundary between the State of New York and the Dominion of Canada. The area treated in this summary is the offshore waters of Lake Erie, Lake Ontario and the Niagara River. This extends from the Erie and Niagara Counties shoreline seaward to the international boundary line.
- C. Type: Water Supply, Fisheries, Wildlife Habitat, Transportation, Energy, Recreation
- D. General Area Description: The area covered in this summary is the New York State portion of Lake Erie, Lake Ontario and the Niagara River. Major characteristics of the water bodies are the Niagara Falls Cataracts, the Niagara Rapids and the Water Intakes and discharge for hydro electric production. The adjacent land use varies from agricultural in the Towns of Somerset and Newfane to residential uses in the Towns of Hamburg, Lewiston and Grand Island. In addition, the urban areas have heavy industry in the City of Lackawanna, Town of Tonawanda and City of Niagara Falls. The discharge of Lake Erie into the Niagara River is approximately 220,000 cubic feet/second, while 100,000-150,000 cubic feet/second are diverted for hydro electric production in the U.S. and Canada. The remaining water flows over the falls.

II STATEWIDE INTEREST IN AREA

A. Problems Facing Area

- 1. Lake Ontario and the Lower Niagara River are experiencing problems associated with toxic chemical contamination (e.g. mirex). This has had a serious impact on the fish habitat areas as well as the economic vitality of various coastal communities.

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2. The possible natural gas drilling in Lake Erie has created serious question marks relative to the environmental safety of such an operation. Although drilling has occurred on the Canadian side of the Lake for over sixty years, various geological and hydrological differences between the two Lake jurisdictional boundaries present numerous questions which need resolution prior to drilling.
3. Recent high water levels have increased property damage and shoreline erosion in the bi-county coastal area. Various structural safeguards should be enforced to protect shoreline property owners.

B. Statewide Value

1. The following characteristics of the coastal water bodies are important to New York State and warrant their consideration as a geographic area of particular concern:
 - Drinking Water Source
 - Energy Supply
 - Economic Resource
 - Transportation Corridor
 - Recreation Resource
 - Historic Resource
 - Functions as an International Boundary
 - Fish/Wildlife Habitat

6/29/77

SECTION II

ACCEPTABLE/ PRIORITY USES FOR THE ERIE AND NIAGARA COUNTIES
COASTAL ZONE

A. INTRODUCTION

1. SCOPE AND PURPOSE - The purpose of this report is to provide information on two major study elements of the ENCRPB Second Year Coastal Zone Management program. These elements were to (1) identify geographic areas of particular concern (GAPC), natural resource types and the remaining coastal area as well as (2) indicate acceptable and priority uses for certain areas indicated above.

The first element permitted all coastal areas to be included in some form of analysis. The breakdown into three levels (i. e. GAPCs, resource types, and remaining coastal area) allowed areas with site specific problems or values to be studied in more detail than the remaining areas. It was determined that the first analysis level should include GAPCs. These exhibited unique characteristics which needed individual attention (e. g. Olcott Harbor, Tonawanda Island). Therefore, such areas were studied independently from the remaining coastal zone.

The second level of analysis included natural resource types which recur throughout the coastal zone (e. g. wetlands, beaches). Such areas perform an important function in the shoreline ecosystem and warrant strong consideration in the CZM program. Due to the number of resource areas, it became infeasible to identify all types as GAPCs. It should be noted that specific natural resources which exhibited unique qualities were recognized as GAPCs (e. g. Wilson-Tuscarora Bay). Therefore, such areas received special attention beyond that given to the particular resource type category.

The third analysis level included the coastal areas remaining after the GAPC and resource type identification. It should be emphasized that the third level encompassed a large portion of the coastal zone and included shoreline areas characterized by different development intensities. Due to this variation, it was necessary to divide the area into urban, semi-urban, and rural sections. This permitted similar analyses for areas characterized by the same land/water use intensity.

The second major study element mentioned above included identifying acceptable and priority uses for the three analysis levels. The approach which was used for such an identification varied for each level. A more detailed description of this process is provided in Subsection F "Acceptable and Priority Uses" of this report.

2. FORMAT AND METHODOLOGY - During the second year work program, numerous memoranda were prepared for the land/water use study element (Task 7.4). Such information was used for ENCRPB in-house staff work or for presentation to CZM citizen groups. This section utilizes the memoranda as attachments in order to explain various study items as well as prevent duplication of effort. The main body of the section contains five parts which correspond with the elements of Task 7.4 described above under "Scope and Purpose". Information on the methodology for the various elements of this section has been included in the text and attachments.

3. RELATIONSHIP TO ENCRPB CZM PROGRAM - In the Regional Planning Board's first year CZM work program, natural resources in the coastal zone were analyzed under Task 7.4. From this analysis, preliminary data and criteria on levels of analysis and permissible/priority uses were identified. This information has been utilized and expanded under Task 7.4 of the Board's second year CZM program.

The elements of Task 7.4 developed for this section are an important part of the CZM program to be developed for this region and the state. The levels of analysis will provide a framework for identifying specific coastal areas and how they should be treated in the coastal zone management program. Information on permissible and priority uses will be an important aspect in managing the CZM program.

B. LAND AND WATER USES HAVING A DIRECT AND SIGNIFICANT IMPACT ON THE COASTAL ZONE

1. DEFINITION OF DIRECT AND SIGNIFICANT IMPACT - Attachment 1 identifies the criteria used to identify uses which have a direct and significant impact on coastal waters. It can be assumed that such criteria form the definition of land/water uses having a direct and significant impact. In addition, Attachment 2 illustrates sample environmental impacts which may occur when specific land/water uses are located within the coastal zone.

2. LAND AND WATER USES WITH A DIRECT AND SIGNIFICANT IMPACT ON COASTAL WATERS - The land/water uses with a direct and significant impact on coastal waters were determined following an examination of the criteria indicated in Attachment 1. The proceeding information illustrates sample land/water uses which appear under each category.

a. Residential

(1) High/Medium Density Housing - Generally the category includes a minimum density level of 9 Families/acre. Examples include: garden apartments, townhouses, one family attached units, two family attached units, low rise multi-family apartments, high rise multi-family apartments, mobile home park, and planned unit development.

(2) Low Density Housing - This category includes those units with densities ranging from 1-8 families/acre. Examples include: one family detached units, mobile home parks, and planned unit development.

(3) Seasonal Home Development - Summer cottages

b. Commercial

(1) Offshore Extraction of Biological Resources - Commercial fishing, mollusk harvesting, aquaculture

(2) Onshore Extraction of Biological Resources - Timber cutting, harvesting of vegetation for research or educative purposes

(3) Onshore Commercial Business Establishments - Park concession stands, scattered commercial development, spot restaurants, gas stations, fast food stores

(4) Concentrated Commercial Development - Shopping malls, strip commercial development, central shopping districts

c. Industrial

(1) Offshore Extraction of Natural Resources - Mining, sand gravel extraction, hydrocarbon extraction

(2) Onshore Extraction and Refining of Natural Resources - Chemical refinery, mining, gravel and sand extraction, most forms of heavy industry

(3) Energy Development - Hydro electric power plant, coal/gas/nuclear power generation facilities

(4) Communications and Utilities Facilities - gas/sewer/water lines, navigation guidance structures, radio/television transmitting towers

(5) Other Water Related Industry - Boat building, industry dependent on waterfront location for production or transportation economies

(6) Non-Water Related Industry - Generally, this category includes manufacturing which does not require large quantities of water for cooling or processing nor need access to dock facilities for transportation purposes: clothing industry and electronic firm.

(7) Industrial Disposal Sites (Solid and Liquid) - Slag dump, nuclear wastes

d. Transportation

(1) Shipping - This category only includes large scale lake freighters or ocean vessels. It does not include barges, fishing or tourist boats.

(2) Port Facilities - Service and docking facilities for large lake vessels

(3) Airport Facilities - Commercially scheduled service facilities

(4) Rail Facilities - Railroad track ROW, marshalling yards, freight/passenger terminal

(5) Limited Access Road - Expressways, Interstate highways, parkways, thruways

(6) Access Roads - Urban collectors, principal arterial streets, minor arterial

(7) Other Transportation Structures and Facilities - Bikeways, trails, pedestrian mover systems, private roads, docking or port facilities for ferry service (e.g. hoover craft in Youngstown Harbor)

e. Recreation

(1) Marina Facilities - Private marinas, tourist boat docking structures, marina pumpout stations, commercial uses catering to marina users.

(2) Boating and Related Launching Facilities - Motor/sail/paddle boat launching and service facilities.

(3) Sport Fishing and Related Public Access Facilities - Fishing, docks, piers, wharfs, fishing easement areas.

(4) Swimming and Related Facilities - Public bathing areas and facilities, scuba diving, public swimming pools.

(5) Active Recreation Facilities - Picnicking, athletic sports, camping.

(6) Passive Recreation Facilities - Nature trails, hiking, fishing, historic site tours.

(7) Private Docking Facilities - Privately owned docks or launch sites.

f. Other Public and Semi-Public Uses

(1) Water Supply Facilities - Water intakes, water treatment plants and pumping stations

(2) Sewage Treatment Facilities - Waste water treatment plants, municipal/industrial/non-municipal point discharges

(3) Solid Waste Disposal - Sanitary landfills, transfer stations, diked disposal areas

(4) Control Structures for Natural Processes - Dikes, levees, rip-rap, seawalls, breakwalls

(5) Education and Research Centers - Research/educational laboratories, public/private schools, wildlife management units and assessment stations.

(6) Other Public/Semi-Public Uses - Fire stations, hospitals, libraries, municipal buildings, military installations

g. Agricultural - Animal husbandry, horticulture, fruit farming, truck farming

h. Natural Area - This category includes vacant, undeveloped land which should remain in its natural state.

C. GEOGRAPHIC AREAS OF PARTICULAR CONCERN

The most detailed level of analysis for the Regional Planning Board's CZM program is the geographic area of particular concern (GAPC). Detailed information on the preliminary GAPC's identified for the program is included in Task 7.3. In Part B of the preceding section of this report, the criteria and process used to identify GAPC's have been delineated. A description of the GAPC's identified has also been included. In order to avoid a duplication of effort, the information on GAPC's contained in Section I has not been repeated here. Reference should be made to the GAPC map prepared as part of Task 7.3 for the second year CZM program.

D. NATURAL RESOURCE TYPES

1. OVERVIEW - The second analysis level includes natural resources which are situated within the Erie and Niagara Counties coastal zone. Such areas represent a vital cog in the shoreline ecosystem and need maximum protection through the coastal zone management program.

Due to the variety of natural resources as well as the number of such areas, it was not possible to analyze each coastal resource as a site specific geographic area of particular concern. Therefore, various resource types were identified which allowed a collective analysis approach.

It should be emphasized that numerous GAPCs include significant natural resources. Such resources contribute to the GAPC value, but often are not the sole reason for the GAPC designation. An example includes Woodlawn Beach in the Town of Hamburg, Erie County. The latter resource (i. e. beach) is situated adjacent to the site of a proposed major sewage treatment plant and lakefront residential area. This creates unique problems relative to water pollution, structural damage due to shoreline erosion, and land use problems relative to locating a recreation area (i. e. Woodlawn Beach) adjacent to a lakefront residential community. Therefore, the cohesion of these factors at Woodlawn Beach warrant the GAPC designation.

Other resource areas within the Erie and Niagara Counties coastal zone have been identified as GAPCs based solely on their resource value. Examples of these areas include Strawberry Island in the Town of Tonawanda, Erie County and Motor Island in the Town of Grand Island, Erie County. Such areas are significant fish spawning sites and represent unique geologic formations (i.e. islands).

The following section identifies those natural resource types which have been identified during the second year coastal zone management work program.

2. NATURAL RESOURCE AREAS TO BE CONSIDERED - Two major factors were considered during the natural resource type identification. These included: (1) the ability of the resource area to be mapped in a comprehensive and efficient manner and (2) public preference.

Numerous natural resource areas were mapped by the New York State Department of Environmental Conservation as well as ENCRPB staff. Such mapping occurred during the first and second year programs. Therefore, these natural resources served as a major determinant in selecting appropriate natural resource types.

The second factor included public preference. The ENCRPB coastal zone management citizen participation structure reviewed the proposed natural resource types and were given opportunity to add further areas throughout the program year.

The following information identifies those natural resource types and indicates the approximate minimum size which would be included. Furthermore, specific examples are given of each type.

a. Wetlands and Adjacent Buffer Area

(1) Size - The size will be determined by the mapping process of NYSDEC. It can be assumed that the minimum size wetlands would be 3-5 acres with an accompanying 100 ft. buffer area. Those wetlands greater than 12.4 acres would have a 200 ft. buffer area.

(2) Erie County Examples - Spicer Creek, Town of Grand Island

(3) Niagara County Examples - Keg Creek, Town of Newfane; Hopkins Creek, Town of Newfane; Six Mile Creek, Town of Porter

b. Forest Lands

(1) Size - The exact size of the forest lands to be included have not been determined.

(2) Erie County Examples - East/West Shores of Grand Island, Numerous areas within the Town of Evans

(3) Niagara County Examples - Hopkins Creek, Town of Newfane

c. Floodplains

(1) Size - One hundred year flood hazard maps-U.S. Army Corps of Engineers

(2) Erie County Examples - Woods Creek, Town of Grand Island; Little Sister Creek, Town of Evans; Big Sister Creek, Town of Evans; Pike Creek, Town of Evans; Delaware Creek, Town of Evans; Niagara River Shoreline, Town of Tonawanda and portions of the Town of Grand Island; Eighteenmile Creek, Town of Hamburg

(3) Niagara County Examples - Fish Creek, Town of Lewiston; Gill Creek, City of Niagara Falls; PASNY Water Intake Canal, City of Niagara Falls; Golden Hill Creek, Town of Somerset; Fish Creek, Town of Somerset; Keg Creek, Town of Newfane; Eighteenmile Creek, Town of Newfane; Twelve Mile Creek, Town of Wilson; Six Mile Creek, Town of Porter; Four Mile Creek, Town of Porter

d. Parklands

(1) Size - The areas included in this natural resource would include all existing public, municipal, county and state parks within the coastal zone.

(2) Erie County Examples - Niawanda Municipal Park, City of Tonawanda; Buffalo Municipal Park, Town of Evans

(3) Niagara County Examples - Krull County Park, Town of Newfane

e. Historic/Archeological Sites

(1) Size - The historic sites would include those identified and nominated for the National Register of Historic Sites and other sites which will be identified in various coastal municipalities (e.g. Villages of Youngstown and Lewiston, Towns of Porter and Lewiston).

Specific archeological sites have yet to be identified.

(2) Niagara County Examples - Lewiston Portage Landing Site, Village of Lewiston; Lewiston Mount, Village of Lewiston; Niagara Reservation State Park, City of Niagara Falls; Fort Niagara State Park, Town of Porter

f. Agricultural Areas

(1) Size - This will only include pre-designated agricultural districts within Erie/Niagara Counties.

(2) Niagara County Examples - Wilson Agricultural District, Town of Wilson; Hartland and Newfane Agricultural District (3 locations), Town of Newfane; Somerset Agricultural District (2 locations), Town of Somerset

g. Areas Subject to Severe Coastal Erosion

(1) Size - The size of such areas have yet to be determined.

(2) Erie County Examples - Hoover Beach, Town of Hamburg; Sections in the Town of Grand Island along the east branch of the Niagara River shoreline; Big Sister Creek Mouth, Town of Evans; Point Breeze, Town of Evans; Delaware Creek Mouth, Town of Evans; Sturgeon Point, Town of Evans; Sections of the Town of Grand Island western shoreline

(3) Niagara County Examples - Village/Town of Lewiston Niagara River Shoreline, Village of Youngstown Niagara River Shoreline, Entire Lake Ontario Shoreline in Niagara County

h. Beaches/Dunes

(1) Size - The size will be determined by on-site inspection.

(2) Erie County Examples - Beaver Island, Town of Grand Island; Woodlawn Beach, Town of Hamburg; Miller's Beach, Town of Evans; Evans Town Park, Town of Evans; Camp Seneca Beach, Town of Evans; Point Breeze, Town of Evans; Cradel Beach, Town of Evans; Camp Pioneer Beach, Town of Evans

(3) Niagara County Examples - Ft. Niagara State Park, Wilson-Tuscarora State Park

i. Fish/Wildlife Habitat

(1) Size - The habitat areas will correspond to the sites identified by the New York State Department of Environmental Conservation.

(2) Erie County Examples - Lake Erie shoreline (i.e. off the coast of the Towns of Brant and Evans), fish spawning area; Delaware Creek (Town of Evans), salmonoid migration area; Big Sister Creek (Town of Evans), salmonoid migration area; Lake Erie off Sturgeon Pt. (Town of Evans), major fishing area; Eighteenmile Creek (Town of Hamburg), major fishing/wildlife area; Pinehurst Littoral Zone (Town of Hamburg), littoral zone for swan and geese; Lake Erie off Athol Springs (Town of Hamburg), fish stocking area; Woodlawn Beach Fringe Area (Town of Hamburg), location of willows and small migrating birds; Niagara River off Ferry Village and Beaver Island State Park (Town of Grand Island), musky and bass spawning area; Big Six Mile Creek (Town of Grand Island), northern pike spawning area; Wildlife Refuge on West Shore of Grand Island; Gun Creek (Town of Grand Island), northern pike spawning area; Spicer Creek (Town of Grand Island), northern pike spawning area; Woods Creek (Town of Grand Island), northern pike spawning area; Little Sixmile Creek (Town of Grand Island), northern pike spawning area; Burnt Ship Creek (Town of Grand Island), marsh area and important fish/bird habitat; Niagara River between Buckhorn Island State Park and Whitehaven Road (Town of Grand Island), northern pike spawning area and waterfowl concentration

(3) Niagara County Examples - Niagara River off Cayuga Island (City of Niagara Falls), muskellunge, northern pike, salmonoid and duck habitat area; Niagara River off the Robert Moses Parkway (City of Niagara Falls), duck habitat; Goat Island-Niagara Reservation State Park (City of Niagara Falls), herring gull rookery; Niagara Gorge (City of Niagara Falls, Town of Lewiston, Village of Lewiston), hawk nesting area and other wildlife habitat; Lower Niagara River Littoral Zone off the shores of the Village of Youngstown and Fort Niagara State Park; Lake Ontario off Fort Niagara Beach (Town of Porter), spring concentration of brown trout and coho salmon; Fourmile Creek-Fourmile Creek State Park (Town of Porter), salmonoid migration area and small bird habitat; Sixmile Creek (Town of Porter), salmonoid migration area; West Branch Twelve Mile Creek (Town of Wilson), northern pike and smallmouth bass spawning area; Lake Ontario off Roosevelt and Sunset Beach, coho and brown trout concentrations; Tuscarora Bay (Town of Wilson), major brown trout fishery and northern pike and smallmouth bass spawning area; Lake Ontario off the Towns of Newfane and Wilson east of Roosevelt Beach, brown trout/coho salmon/migrating waterfowl concentration; Eighteenmile Creek (Town of Newfane), salmonoid runs and northern pike spawning area, paddle ducks and mallard habitat; Keg Creek (Town of Newfane), northern pike spawning area; Fish Creek (Town of Somerset), warm water fish habitat and fur bearer wildlife habitat

j. Streams and Adjacent Area (100 ft. from streambank)

(1) Size - The streams will include those identified as open space corridors in the ENCRPB Adopted Regional Recreation and Open Space Plan and Program and situated within the coastal zone. In addition, streams serving as fish habitats will be included within this resource type.

(2) Erie County Examples - Delaware Creek, Town of Evans; Big Sister Creek, Town of Evans; Little Sister Creek, Town of Evans; Pike Creek, Town of Evans; Eighteenmile Creek, Town of Hamburg; Rush Creek, Town of Hamburg; Smokes Creek, City of Lackawanna; Two Mile Creek, City of Tonawanda/Town of Tonawanda; Big Six Mile Creek, Town of Grand Island; Gun Creek, Town of Grand Island; Spicer Creek, Town of Grand Island; Woods Creek, Town of Grand Island; Little Six Mile Creek, Town of Grand Island; Burnt Ship Creek, Town of Grand Island; Tonawanda Creek, City of Tonawanda

(3) Niagara County Examples - Tonawanda Creek, City of North Tonawanda; Cayuga Creek, City of Niagara Falls; Gill Creek, City of Niagara Falls; Fourmile Creek, Town of Porter; Sixmile Creek, Town of Porter; West Branch of Twelvemile Creek, Town of Wilson; East Branch of Twelvemile Creek, Town of Wilson; Eighteenmile Creek, Town of Newfane; Keg Creek, Town of Newfane; Fish Creek, Town of Newfane; Golden Hill Creek, Town of Newfane

k. Scenic Vistas

(1) Size - Such areas will be determined by on-site inspection.

(2) Erie County Examples - Pinehurst, Town of Hamburg

(3) Niagara County Examples - River Road between the Village of Youngstown and Lewiston, Towns of Lewiston and Porter; Portions of Lower Lake Road in the Town of Somerset

E. REMAINING COASTAL AREA

1. OVERVIEW - The third analysis level includes the coastal area remaining after the identification of resource types and GAPCs. This level encompasses a large area with varying land/water use intensities. Due to the inequity of conducting the same analysis for the remaining coastal zone, it was necessary to divide the area into three sections. These included urban, semi-urban, and rural.

A comprehensive analysis of the sector determination is included as Attachment 3 to this section. Such an analysis identifies the municipalities within each sector.

F. ACCEPTABLE AND PRIORITY USES

1. OVERVIEW - A major work task of the second year coastal zone program includes identifying acceptable and priority land/water uses for three analysis levels (i.e. GAPCs, natural resource types, remaining coastal zone area). It was previously indicated that the GAPCs and natural resource types represent unique areas within the region's coastal zone. Therefore, the acceptable/priority use designations for the above areas will be more detailed than those determined for the third analysis level (i.e. remaining coastal zone).

The following information reviews the criteria used in designating acceptable/priority uses and identifies such designations in a matrix form.

2. GEOGRAPHIC AREAS OF PARTICULAR CONCERN

a. Criteria - The ENCRPB staff in conjunction with the CZM Subcommittee and coastal municipalities recognized six criteria for determining acceptable uses within geographic areas of particular concern. These included environmental impact dependency, local zoning, applicable federal/state standards, public preference, and prior commitment of land. It should be noted that quantitative data was not available for measuring the environmental impact or dependency criteria against the particular land/water uses. Therefore, subjective judgment was necessary for analysis purposes relative to the latter factors.

Following the identification of acceptable uses, a priority use ranking was developed for each GAPC. Such priorities included a high, medium, and low value scale. The criteria used in determining priorities were the same as those reviewed in the acceptable use list designation. However, a major additional factor included local, county, regional and state plan recommendations for the particular GAPC. It should be noted that each criterion was evaluated relative to the GAPCs. However, there was not a strict formula for determining acceptability and priorities. For instance, if a particular use within Olcott Harbor satisfied four out of six criteria it did not necessarily indicate an acceptable finding. Various factors prevented use of a set formula. These included public preference, changing conditions, and major problems associated with a particular criterion which outweighed the positive satisfaction of other criteria.

The following paragraphs identify the seven criteria used to determine acceptable/priority uses.

(1) Environmental Impact - The first year CZM work program Task 7.4 included a report entitled Aspects of Natural Resources for Determining Priorities and Permissible/Prohibited Uses for Coastal Areas.

The above report identified four possible environmental impacts which specific land/water uses exhibit relative to GAPCs or resource areas. These included the following:

(a) Beneficial - The particular land/water use exhibits total compatibility with the GAPC. The particular land/water use enhances the natural processes/value of the GAPC.

(b) Benign - The land/water use has a mild impact on a particular GAPC. The land/water use will not significantly increase or decrease the value of the GAPC. Minor mitigating controls may be necessary to assure compatibility.

(c) Tolerable - The land/water use is endurable by a particular GAPC, however, it is not naturally compatible. The natural processes/value of the GAPC are subjected to abnormal negative impacts which may hinder their proper function. Compliance with environmental controls is necessary prior to approving the particular land/water use.

(d) Adverse - The land/water use is incompatible with the particular GAPC. In most cases the land/water use should be prohibited from the particular GAPC. Approval is permitted only after 1) careful examination, 2) compliance with strict performance standards, and 3) a comparison of alternatives.

It should be noted that the benign and tolerable categories were combined into a single type entitled limited impact. This was due to the similar characteristics of the former categories (i. e. benign, tolerable).

Sample factors which were considered under the environmental impact criterion included: socio-economic, aesthetic, water quality, compatibility with surrounding uses, air quality, and noise impact.

(2) Dependency - It was determined that the geographic areas of particular concern should reflect those land/water uses which are dependent on locating within their boundaries. Such dependency may represent economic, recreational or natural necessities. Therefore, each use was evaluated pertinent to their reliance on a GAPC location. This criterion aided in maximizing the land/water use efficiency of each area of concern, as well as eliminating incompatible uses.

(3) Existing Federal/State Standards - The appropriate federal/state regulations were reviewed relative to their applicability to coastal zone land/water uses. The main intent of this criterion was to eliminate specific uses from the GAPC analysis. Such elimination would occur because the use was unable to meet a specific federal/state standard. The standards evaluated include those associated with the following legislation:

(a) Federal - The National Environmental Policy Act of 1969 (NEPA), Water Pollution Control Act Amendments of 1972 (PL 92-500), The River and Harbor Act of 1899, The River and Harbor Act of 1902, The Fish and Wildlife Act of 1956, the Migratory Marine Game Fish Act, The Fish and Wildlife Coordination Act, The National Historic Preservation Act of 1966, the Water Resources Planning Act, and the Coastal Zone Management Act of 1972

(b) State - State Building Code, New York State Environmental Conservation Law, and New York State Freshwater Wetlands Act of 1975

(4) Prior Commitment of Lands - The geographic areas of particular concern were examined to determine existing land/water uses on the site. Such uses were deemed acceptable due to the existing infrastructure (e.g. roads, utilities, physical building) which was installed to service the area. It should be noted that numerous land/water uses which are committed to a GAPC (due to their physical presence) are not necessarily consistent with the existing or goal environment. For example, the Robert Moses Parkway separates the Devils Hole and Whirlpool State Parks from the City of Niagara Falls. Such a use (i.e. Limited Access Highway) was found acceptable, but received a low priority. The latter rating resulted from the adverse environmental impact the parkway has on park visitors and the poor public access which results from the road location.

(5) Local Zoning - The municipal zoning ordinances were reviewed relative to the GAPCs. This indicated the local policy concerning the area and served as an important criterion for determining acceptable/priority uses. It should be noted that numerous local zoning regulations were very old and did not present a realistic approach to shoreline land use. Therefore, staff discretion was used relative to the weight assigned this criterion in arriving at the use designations.

(6) Public Preference - The acceptable/priority uses were reviewed and approved by the Coastal Zone Management Subcommittee. Therefore, the designations reflect significant citizen input. It should be emphasized that particular acceptable/priority designations were often initiated at the citizen level. This provided a major aid to ENCRPB staff in determining proper designations. The acceptable/priority uses were also reviewed by the chief elected official in each coastal municipality as well as the local coastal planning board chairmen.

(7) Federal, State, Regional, County and Local Planning Documents - Appropriate government planning documents were reviewed pertinent to the applicable GAPC land/water area. This provided an indication of the priority uses within the areas of concern. It should be

noted that Attachment 4 to this section identifies the planning documents reviewed relative to each GAPC. Due to conflicts among various plans and the CZM goals, staff discretion was used relative to the weight assigned this criterion in arriving at the use priorities.

b. GAPC-Acceptable and Priority Uses - As stated in the above paragraphs, the GAPC acceptable uses were determined by evaluating the six criteria against each geographic area of particular concern. It should be noted that numerous uses will have to comply with performance standards in order to be as acceptable. For example, low density residential housing is an acceptable use within the GAPC entitled Lower River Scenic Residential Coastal Area. However, a mere statement indicating that such a use is acceptable does not serve to alleviate the particular problems or enhance the values of the GAPC. In the example provided, the Lower River area is recognized as a valuable scenic resource while also suffering from severe shoreline erosion problems. Therefore, specific performance standards should accompany the identification of low density housing as an acceptable use. Such standards might include structural requirements to insure shoreline stabilization, building setback and height restrictions or sign/billboard controls. The actual establishment of performance standards may be the responsibility of the ENCRPB in conjunction with the CZM Subcommittee and coastal municipalities in later work programs, or it may be left to the discretion of each coastal municipality to determine the appropriate regulations. The latter approach would occur during the development of local coastal zone programs.

Priority rankings (i. e. high, medium and low) were established for those uses deemed acceptable within each GAPC. If a use was not given a priority ranking, it was deemed unacceptable. Such rankings will assist local municipalities in resolving land/water use conflicts within the coastal zone and in determining the most feasible development approach within each GAPC. The following information identifies various characteristics of the priority rankings as well as characteristics of those uses found unacceptable.

- High Priority

- This indicates land/water uses which have been identified in various planning documents as recommended uses within the GAPC.
- High Priority uses have positively complied with the seven criteria used in the evaluation.
- The high priority uses, if in compliance with future performance standards, address the approved goals and objectives identified in the CZM program.

- Medium Priority

- The uses do not create significant impact on the GAPC, but are not recognized within the applicable planning documents as the development focus for the area.

- Medium priority uses complement the high priority items by providing support facilities (e.g. access roads, communications/utilities, water supply facilities).
- Medium priority uses adequately satisfy the seven criteria used in the evaluation.

- Low Priority

- The uses create environmental problems which can only be alleviated through strict performance standards.
- The uses do not adequately satisfy various criteria used in the evaluation. However, the inadequacies are not significant enough to warrant an unacceptable finding.

- Unacceptable

- The uses are incompatible with the goal environment of the particular GAPC.
- The uses do not satisfy various criteria used in the evaluation. Such inadequacies cannot be alleviated through performance standards.

It should be noted that Attachment 5, 6, 7, and 8 to this section identify the acceptable and priority uses for the four geographic areas within the study area (i.e. Lake Ontario, Lower Niagara River, Upper Niagara River and Lake Erie). Such attachments are in a matrix form which identify the land/water uses across the horizontal axis and the appropriate GAPCs down the vertical column.

3. NATURAL RESOURCE TYPES-ACCEPTABLE/PRIORITY USES -

The function of natural resource types within the Erie and Niagara Counties coastal zone program has been outlined in Part D (i.e. Natural Resource Types) of this section. The following paragraphs define the criteria used in determining the acceptable/priority uses and illustrates the land/water use rankings.

a. Criteria - The natural resource types pertain to areas which recur throughout the coastal zone. Such types are not site specific and therefore could not be measured against all the criteria used in the GAPC analysis. For example, local zoning was employed as an important criterion in the site specific geographic areas of particular concern review. However, each natural resource type (i.e. wetlands) include numerous areas (i.e. Keg Creek, Wilson Bay) which reflect different characteristics and are located in various coastal municipalities. This variety indicates a variation in zoning requirements applicable to each resource area. Therefore, a strict zoning standard consistent to all areas was not possible. Other criteria

used in the GAPC analysis which were not applicable to the resource type review include prior commitment of lands, and the review of pertinent planning documents.

The following paragraphs identify those criteria used in determining acceptable/priority uses within the natural resource types.

(1) Environmental Impact - The resource types were measured using subjective judgments relative to the environmental impact the appropriate land/water uses have on their natural function. This factor was a major criterion in determining acceptable/priority uses. The uses were assigned beneficial, limited, and adverse impacts relative to each resource type. Such classifications and the environmental factors considered under this criterion are defined in Sub-section 2(a) (i. e. Acceptable and Priority Uses-Criteria) of this portion of the report.

(2) Dependency - The uses were analyzed relative to their dependency on locating within the particular natural resource area. For example, farming is a use which depends on prime farm land for a productive operation. Thus, farming satisfies the dependency criterion when measured against the agricultural area resource type.

(3) Existing Federal/State Guidelines - Applicable federal/state standards were reviewed relative to the resource types. This eliminated land/water uses which were unable to meet the standards applicable to certain natural resources. Sub-section 2(a) of this section illustrates the standards analyzed.

(4) Public Preference - The acceptable/priority uses were reviewed by the coastal zone citizen participation structure.

b. Natural Resource Types-Acceptable and Priority Uses - The acceptable/priority uses for the resource types were determined by analyzing the natural resources and land/water use interface against the four criteria identified in the above paragraphs. As was stressed in the GAPC analysis, a mere listing of acceptable/priority uses for the natural resource types does not enhance the value or alleviate the particular problems associated with coastal natural resources and land/water development. Therefore, appropriate performance standards should accompany the acceptable/priority use list. The actual establishment of performance standards may be the responsibility of the ENCRPB in conjunction with the CZM Subcommittee and coastal municipalities in later work programs, or it may be left to the discretion of each coastal municipality to determine the appropriate regulations.

The actual priority rankings include high, medium, low and unacceptable. Specific characteristics of each ranking generally correspond to those in the GAPC analysis. Therefore, reference should be made to Sub-section 2 (i. e. GAPC-Acceptable and Priority Use) of this section.

It should be noted that Attachment 9 illustrates in a matrix form the acceptable/priority uses for the natural resource types. The matrix is organized in the same manner as those prepared for geographic areas of particular concern. Further research is being conducted relative to beaches/dunes, and areas subject to severe coastal erosion. Therefore, specific acceptable/priority uses will be provided at a later date.

The natural resource type matrix further indicates that rankings for historic/archeological sites and scenic vistas will be dependent on compliance with certain performance standards. Such standards may include the provision of a detailed site plan indicating the relation between the land/water use and natural resource. The impact such uses will have on historic sites and scenic vistas will differ depending on various factors. Such factors include structure size, aesthetic quality, and use intensity. Therefore, it is necessary to review each use relative to the specific situation prior to assigning acceptable/priority uses.

4. REMAINING COASTAL AREA - The third analysis level encompassed the remaining coastal area. Due to the wide variation in land/water use characteristics relative to this level, it was necessary to consider three sub-sectors. These included urban, semi-urban, and rural. Such areas are defined in Part E (i. e. Remaining Coastal Area) of this section.

The approach used in determining acceptable/priority uses for the remaining areas differed from the initial two analysis levels (i. e. GAPCs and Natural Resource Types). Due to the large area and land/water use variation, it was necessary to maintain a flexible methodology. Therefore, the acceptable uses developed for each subsection (i. e. urban, semi-urban, and rural) reflect limited restrictions. It should be noted that priority rankings were not formulated for the third analysis level.

The criteria used in identifying the acceptable uses included: (1) environmental impact, (2) applicable federal and state regulations, and (3) dependency on an urban, semi-urban or rural location. A detailed review of these criteria can be found in Section 2(a) (i. e. GAPC-Criteria) of this section.

The following information identifies those land/water uses which have been found unacceptable within each sub-sector.

a. Urban - Industrial Waste Disposal (solid and liquid);
Airport Facilities.

b. Semi-Urban - Industrial Waste Disposal (solid and liquid);
Port Facilities (major); Airport Facilities; Non-Water Related Industry.

c. Rural - High/Medium Density Housing; Concentrated
Commercial Development; Onshore Extraction and Refining of Natural
Resources; Other Non-Water Related Industry; Industrial Waste Disposal
(solid and liquid); Port Facilities (major); Airport Facilities.

G. CONCLUSION

The major findings of this report pertain to the methodology incorporated during the analysis as well as the acceptable/priority use lists and proposed performance standards.

It was felt that the use of three analysis levels (i. e. GAPCs, Natural Resource Types, and Remaining Coastal Areas) permitted a comprehensive and detailed review of the entire coastal zone. Such an analysis recognized the natural resource significance of much of the coastal zone while perceiving the development opportunities adjacent to the shore.

The ENCRPB in conjunction with the CZM Subcommittee and coastal municipalities used two major guidelines in determining acceptable/priority uses. These included citizen involvement and the ability of local communities to incorporate the information into future local CZM programs.

As was mentioned throughout the report, a major criterion in determining acceptable/priority uses was public preference. Such input was solicited at numerous public meetings, local town board and planning board sessions, and through mail referrals. In addition, local zoning and master plans were used as important criteria in determining use acceptability and priorities.

A further guide which was adhered to by the ENCRPB pertained to the need for a flexible document. Such flexibility would enable the local municipalities to incorporate the acceptable/priority use information into applicable ordinances and regulations. In addition, the report suggests that acceptable/priority use lists will be supplemented with appropriate performance standards which may be developed by the coastal municipalities. This further indicates the flexible approach followed by the ENCRPB while developing acceptable/priority uses.

The information contained in this report will provide input relative to defining alternative coastal boundaries. The data illustrated in Part B - Land and Water Uses Having a Direct and Significant Impact on Coastal Waters will form

a major criterion in determining the coastal zone line. The federal CZM legislation mandates that the above uses be included within the CZM program. Furthermore, the natural resource areas identified in Part D Natural Resource Types will also provide valuable data in determining the inland extent of the coastal zone.

MEMORANDUM

ATTACHMENT 1

MEM J. Rasey

DATE 12/27/76

SUBJECT LAND AND WATER USES HAVING A DIRECT AND SIGNIFICANT
IMPACT ON COASTAL WATERS

The identification of uses which have a direct and significant impact on coastal waters is an important task in the CZM Program. This element directly relates to other major CZM tasks (i. e. identification of geographic areas of particular concern, identification of a CZM boundary, and delineation of uses to be covered in the program).

Before these uses can be identified, criteria must be established for defining "direct and significant" impacts. There are six general criteria that can be used to identify uses which have a direct impact on coastal waters. These include:

- a) physical - impacts on circulation, flow, volume, and temperature of coastal waters
- b) chemical - impacts on salinity, dissolved gases, nutrients and pollutants within coastal waters
- c) biological - impacts on types, diversity, viability and productivity of biotic resources within coastal waters
- d) littoral - impacts on shoreline and coastal waters through erosion or accretion patterns
- e) aesthetic - impacts on sensory perception of the coastline
- f) socioeconomic - impacts on the patterns of usage for the shoreline and coastal waters

In relating these criteria to land and water uses, those uses which directly utilize coastal waters can be considered to have a direct and significant impact. Included would be uses which are located on, in or under coastal waters, or are located along the shore and directly utilize these waters in some capacity. These types of uses can have direct physical, chemical, biological or littoral impacts on coastal waters. In addition, they can be considered to have significant aesthetic and socio-economic impacts.

There are also a variety of land uses which, although not directly utilizing coastal waters, can have a significant impact on these waters. These uses can affect the coastal waters either (1) through the inland drainage system or (2) by aesthetic socioeconomic impacts due to their close proximity to the shore.

Land uses impacting coastal waters via the drainage system can do so through waste disposal, seepage of pollutants, or by affecting erosion and stream sediment. In considering these methods of impact, any land use involving development has the potential to produce direct and significant impacts on coastal waters. These impacts can be physical, chemical, biological, littoral, aesthetic, or socioeconomic in nature. In addition to the concentration of pollutants, location is an important consideration in determining whether these impacts are "direct and significant". Since pollutants tend to be diluted as they travel downstream, those that originate closest to the coast would generally have the most direct impact.

Land uses can also have important aesthetic and socioeconomic impacts on coastal waters by virtue of their close proximity to the shore. Aesthetic impacts would include visual as well as other sensory perceptions (i.e. odor of air pollutants). Socioeconomic impacts would include the affect that shoreline land uses have on the use of coastal waters (i.e. access). The geographic location of these land uses is an important consideration in determining "direct and significant" impacts on coastal waters. All land uses located directly adjacent to the shoreline can be considered to have a direct and significant impact on coastal waters.

Some land uses located close to, but not adjacent to the shoreline can also significantly impact coastal waters. Included could be sensory impacts (i.e. visual aspect of high rise buildings, odor of air pollutants, etc.) or affects on the usage of coastal waters. Generally, those inland uses that produce an obvious visual (or other sensory) impact on coastal waters can be considered to have a direct and significant affect. Those inland uses that are located between the shoreline and the nearest public access feature (i.e. road, park, etc.) can also be viewed as having a direct and significant impact on access and usage of coastal waters. In addition, those inland uses which are considered to either have direct and significant impacts on the drainage system or produce major sensory impacts can affect the usage of coastal waters.

In summarizing the above information, any water use or land use that is located adjacent to the shoreline can have a direct and significant impact on coastal waters. All land/water uses consequently should be included for consideration in the context of the coastal zone management program. The following preliminary list of land/water uses has accordingly been set up and will form a basis for determining allowable uses in the coastal zone.

Residential

- High/Medium Density
- Low Density
- Seasonal Home Development

Commercial

- Offshore Extraction of Biological Resources
- Onshore Extraction/Processing of Biological Resources
- Low Density Commercial/Business Development
- Concentrated Commercial Development

Attachment 1 (Cont.)

Industrial

- Offshore Extraction of Natural Resources
- Onshore Extraction/Refining of Natural Resources
- Energy Development Facilities
- Communications and Other Utility Facilities
- Other Water Related Industry
- Other Non-Water Related Industry
- Industrial Disposal Areas (Solid & Liquid)

Transportation

- Shipping
- Port Facilities
- Airport Facilities
- Rail Facilities
- Limited Access Roads
- Access Roads
- Other Transportation Structures/Facilities

Recreation

- Marina Facilities
- Boating and Public Launching Facilities
- Sport Fishing and Related Public Access Facilities
- Swimming and Related Facilities
- Active Recreation Parks/Areas
- Passive Recreation Parks/Areas
- Private Docking Facilities

Other Public/Semi-Public Uses

- Water Supply Facilities
- Sewage Treatment Facilities
- Solid Waste Disposal
- Control Structures for Natural Processes
(i. e. erosion and flood control)
- Education/Research Centers
- Other Public/Semi-Public Uses

Agriculture

Open Space

ATTACHMENT 2

ERIE AND NIAGARA COUNTIES REGIONAL PLANNING BOARD

Land and Water Use Impact On
Coastal Waters

Type of Impact on Coastal Waters

LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
RESIDENTIAL High/Medium Density	-increased run off would have a minor affect on water volume and flow	-sheet erosion could be accentuated -- more sediment -oils and salts washed from roads/parking areas in large developments may have impact	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from developments can affect accretion patterns in coastal waters	-major visual impact particularly if high rise bldgs. are involved -intensity of impact dependent on height of bldgs distance from shore & surrounding development and vegetation	-provides housing (public benefit) -affects access (can be beneficial if shoreline is reserved as public open space) -increased demands for public facilities utilizing coastal waters -precludes many other uses -economic benefits (tax base, construction work)
Low Density		-waste effluent or septic tank seepage into coastal waters (if no public sewers) -sheet erosion could be accentuated--more sediment	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from developments can affect accretion patterns in coastal waters	-some visual impact particularly if located adjacent to shoreline	-provides housing (public benefit) -affects public access (generally a negative impact) -precludes most other land/water uses -economic benefits (tax base, jobs)
Seasonal Home Development		-waste effluent or septic tank seepage into coastal waters (if no public sewers) -sheet erosion could be accentuated--more sediment	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from developments can affect accretion patterns in coastal waters	-major negative visual impact if shoreline development consists of substandard structures, is deteriorated, or has too high a density -otherwise, visual impact is similar to "low density"	-affects public access (generally a negative impact) -precludes most other land/water uses -economic benefits (tax base, jobs)
COMMERCIAL Offshore Extraction of Biological Resources		-use of ships can result in minor oil seepage from engines	-direct impact on marine biological species that are being gathered -over gathering or interference with reproduction can threaten the survival of certain species	-accretion patterns could be affected if sediments are stirred up	-visual impact of boats, collection equipment (i.e. nets), etc.	-extraction in certain areas would preclude other uses (i.e. shipping) -economic benefits (provides source of food (public benefit))
Onshore Extraction/Processing of Biological Resources	-possible affects on temperature, flow and circulation if water is used in processing	-waste effluent or septic tank seepage into coastal waters (if no public sewers) -sheet erosion could be accentuated--more sediment	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental effects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from developments can affect accretion patterns in coastal waters	-major visual impact if located adjacent to shoreline -possible odors (i.e. waste products)	-extraction in certain areas would preclude other uses -economic benefit -provides source of food -affects public access if adjacent to shoreline

Type of Impact on Coastal Waters						
LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
Low Density Commercial/Business Development	-increased run off would have minimal affect on water volume and flow	-waste effluent or septic tank seepage into coastal waters (if no public sewers) -sheet erosion could be accentuated--more sediment	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development can affect accretion patterns in coastal waters	-some visual impact particularly if located adjacent to shoreline	-precludes certain other uses -affects access (generally negative) -economic benefits -provides services to public
Concentrated Commercial Development	-increased run off would have a minor affect on water volume and flow	-sheet erosion could be accentuated--more sediment -oils and salts washed from roads/parking areas in large developments may have impact	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development can affect accretion patterns in coastal waters	-major visual impact particularly if high rise bldgs are involved -intensity of impact dependent on height of bldgs, distance from shore and surrounding development and vegetation	-precludes most other uses -major negative impact on access -economic benefits -provides services to public
INDUSTRIAL Offshore Extraction of Natural Resources	-increased turbidity	-possible leakage/spillage of resource being extracted (oil, gas, etc.) -possible seepage of pollutants from ship cargo or engines	-any seepage/leakage of pollutants (i.e. gas, oil, etc.) can kill or damage marine phenomena and affect the biological chain -human water supply can be affected by pollutants	-accretion patterns could be affected if sediments are stirred up	-visual impact of boats, extraction equipment, etc.	-precludes other water uses in those specific areas -economic benefits -provides resources (i.e. energy) to public
Onshore Extraction/Refining of Natural Resources	-possible affects on temperature, flow and circulation if water is used in industrial processes	-waste effluent or septic tank seepage into coastal waters (if no public sewers) -sheet erosion could be accentuated--more sediment	-flora/fauna habitat can be eliminated -resultant sediment and pollutants can affect biological resources -major oil spillage could significantly affect biological resources and human water supply	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development can affect accretion patterns in coastal waters	-major visual impact if located adjacent to shoreline -possible odors (i.e. from oil refineries) -possible noise impacts	-precludes other coastal uses -affects access to shoreline if located adjacent to it -economic benefits -provides resources/products to public
Energy Development Facilities	-potential major impacts on temperature, flow and circulation (hydro facilities can also have major effects on volume)	-waste effluent or septic tank seepage into coastal waters (if no public sewers) -sheet erosion could be accentuated--more sediment	-thermal pollution can significantly affect biological resources (may be positive for some species) -onsite flora/fauna habitat can be eliminated -any resultant sediment and pollutants can affect fish and other marine resources	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development can affect accretion patterns in coastal waters	-major visual impact of facilities that are located near the shoreline	-major impact of providing energy (a service) to public -precludes other coastal uses -affects access if located along the shoreline -economic benefits
Communications and Other Utility Facilities (mostly transmission)		-sheet erosion could be accentuated through loss of vegetation--more sediment	-onsite flora/fauna habitat can be eliminated or affected -resultant sediment can affect fish and other marine resources	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development can affect accretion patterns in coastal waters	-major visual impact of above-ground transmission facilities (particularly high level transmission lines)	-provides utility services to public -can affect access and preclude other coastal uses in certain areas (may not if lines are underground)

Type of Impact on Coastal Waters

LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
Other Water-Related Industry	-possible effects on temperature, flow and circulation if water is used in industrial processes	-waste effluent or seepage of chemicals, oils, etc. into coastal waters -erosion could be accentuated--more sediment	-"thermal" pollution can significantly affect biological resources (may be positive for some species) -onsite flora/fauna habitat can be eliminated -any resultant sediment & pollutants can affect fish & other marine resources	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development patterns in coastal waters	-potential major visual impact if located next to shoreline (intensity of impact depends on height of bldgs, distance from shore, and surrounding development/vegetation)	-precludes other coastal uses -affects access to shoreline if located adjacent to it -economic benefits -can provide products to public
Other Non Water-Related Industry		-waste effluent or seepage of chemicals, oils, etc. into coastal waters -erosion could be accentuated--more sediment	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline development can affect shoreline erosion (i.e. thru removal of vegetation that retards erosion) -sediment from development patterns in coastal waters	-potential major visual impact if located next to shoreline (intensity of impact depends on height of bldgs, distance from shore, and surrounding development/vegetation)	-precludes other coastal uses -affects access to shoreline if located adjacent to it -economic benefits -can provide products to public
Industrial Waste Disposal (solid and liquid)		-seepage from waste disposal area could have a major impact on coastal waters (i.e. toxic chemicals)	-possible elimination of flora/fauna habitat in disposal area (i.e. filling of wetland) -seepage from waste areas may kill or damage biological resources in coastal waters (i.e. fish, shellfish, etc.)	-sheet erosion may be accentuated -sediment may affect accretion patterns in coastal waters	-waste disposal sites may have a major negative visual impact if proper landfill techniques are not used -visual impact of terminated sites is dependent on landscaping	-precludes other coastal uses -affects access to shoreline if located adjacent to it (can have a beneficial impact if terminated site is turned into public open space)
TRANSPORTATION Shipping	-large ships could have a minor affect on circulation, flow and volume (thru displacement) in coastal waters-particularly in a constricted area (i.e. Niagara River)	-possible spillage/leakage of cargo (i.e. -possible leakage of oil, gas from ship engines and exhaust	-any spillage/leakage of pollutants can kill or damage marine phenomena and affect the biological chain	-ships can stir up bottom sediments in shallow water and affect accretion patterns	-visual impact of ships -substantial oil spills can have a very negative aesthetic impact on coastal waters -possible odors if close to shore	-use is not compatible with certain other water uses -provides transportation service to public -economic benefits if there are port facilities to take advantage of it
Port Facilities	-extensive modification of shoreline could affect circulation and flow	-possible spillage/leakage of cargo from loading/unloading facilities -oils and salts washed from roads, parking areas, and storage areas -sheet erosion could be accentuated	-flora/fauna habitat can be eliminated or damaged (i.e. filling of wetlands) -resultant sediment and pollutants can affect fish (i.e. detrimental affects on spawning)	-shoreline facilities can affect shoreline erosion -sediment washed from developed areas (thru sheet erosion) can affect accretion patterns in coastal waters	-major visual impact of shoreline facilities -spillage/leakage of cargo (i.e. oil) can have major visual impact -possible odors from stored materials (or from spillage of cargo)	-precludes other coastal uses -economic benefits (tax base, jobs, encourages other industries) -provides transportation service to public -affects access to coastal waters
Airport Facilities		-pollutants from spillage or exhaust of planes can impact coastal waters	-pollutants can affect fish and marine resources as well as terrestrial flora and fauna -noise can impact on wildlife -loss of flora/fauna habitat through construction of airport facilities		-major visual impact of planes and airport facilities -major noise impact of planes taking off and landing	-precludes other coastal uses -affects coastal uses outside of site due to noise and visual impact -provides transportation service to public -economic benefits -affects access to coastal waters

Type of Impact on Coastal Waters

LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
Rail Facilities		-spillage/leakage of liquid rail cargo near coast could impact coastal waters through the drainage system	-loss of flora/fauna habitat via construction of rail facilities -possible impact of noise and pollutants (spilled cargo, exhaust)		-visual impact of rail vehicles and facilities -noise impact of rail vehicles	-can affect access to coastal waters -precludes other onsite coastal uses -provides transportation of goods to public -some economic benefits (may encourage industrial development that depends on rail transportation) -can have major impacts on access -economic impact -provides source of transportation to public -construction provides jobs -can have major impact on the use of adjacent land (will encourage certain uses)
Limited Access Roads		-oils and salts washed from roads may impact coastal waters	-loss of flora/fauna habitat via construction of roads (i.e. filling of wetlands) -sediment and pollutants washed from road ROW's can affect fish, waterfowl, etc.	-sediment from road construction can wash into coastal waters and affect accretion pattern	-major visual impact of vehicles and roadway facilities if located adjacent to shore -odor from exhaust fumes depending on winds and closeness to shore -noise from vehicles	-can have major impacts on access -economic impact -provides source of transportation to public -construction provides jobs -can have major impact on the use of adjacent land (will encourage certain uses)
Access Roads		-oils and salts washed from roads may impact coastal waters	-loss of flora/fauna habitat via construction of roads (i.e. filling of wetlands) -sediment and pollutants washed from road ROW's can affect fish, waterfowl, etc.	-sediment from road construction can wash into coastal waters and affect accretion pattern	-some visual impact of vehicles and roadway facilities -possible odor and noise impacts	-can provide access to the shore (can also have a negative impact on pedestrian access) -economic impact -provides source of transportation to public -construction provides jobs -can have a major impact on the use of adjacent land (will encourage certain uses)
Other Transportation Structures/Facilities						
RECREATION Marina Facilities	-extensive modification of shoreline (i.e. excavation of bays) can affect circulation and flow -docks extending into water can affect circulation	-waste effluent or seepage of oil, gas from boats and tanks into water -erosion could be accentuated, bottom stirred up--more sediment	-construction of marina facilities can eliminate or damage flora/fauna habitat -pollutants and sediment can affect biological resources -people and noise and any pollutants may affect fish, waterfowl, and wildlife	-onsite loss of vegetation could accentuate erosion -any additional sediment resulting from this use could affect accretion patterns	-visual impact of boats and marina facilities -possible odors (i.e. gas/oil) -noise from boat motors, people	-precludes other onsite uses and can affect use of adjacent sites -provides a means of recreation to public -economic impacts (are somewhat dependent on whether facilities are public or private) -affects access to shore (public or private) -can encourage adjacent people/boat oriented uses

Type of Impact on Coastal Waters

LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
Boating and Public Launching Facilities	-docks can affect circulation -minor modification of shoreline	-possible leakage of some oil/gas from boat motors -erosion could be accentuated, bottom sediments could also be stirred up--more sediment	-construction of launching facilities can eliminate or damage flora/fauna habitat -people, noise and any pollutants may affect fish, waterfowl, and wildlife	-onsite loss of vegetation could accentuate erosion -any additional sediment resulting from this use could affect accretion patterns	-visual impact of boats and launching facilities -possible odors (gas/oil) -noise from boat motors -able to public -can provide public access to coastal waters -economic impact (esp. secondary need for equipment, accommodations, etc.)	-precludes certain other uses and affects use of adjacent sites -type of recreation available to public -can provide public access to coastal waters -economic impact (esp. secondary need for equipment, accommodations, etc.)
Sport Fishing and Related Public Access Facilities		-possible leakage of some oil/gas from motors if boats are used	-construction of any access facilities may eliminate or damage flora/fauna habitat -influx of people may affect waterfowl, wildlife and vegetation	-onsite loss of vegetation could accentuate erosion -any additional sediment resulting from this use could affect accretion patterns	-visual impact of boats (if boat-oriented) and access facilities -possible odors of gas/oil if facilities are boat-oriented -some noise from boats (if boat-oriented)	-precludes certain other uses and affects use of adjacent sites -type of recreation available to public -can provide public access to coastal waters -economic impact (esp. secondary need for equipment, accommodations, etc.)
Swimming and Related Facilities	-extensive modification of shoreline can affect circulation and flow	-additional sediment could be stirred up from bottom	-influx of people would affect fish, waterfowl, wildlife, vegetation -construction of facilities can eliminate or damage flora/fauna habitat	-onsite loss of vegetation could accentuate erosion -any additional sediment resulting from this use could affect accretion patterns	-visual impact of people, swimming facilities -noise from influx of people -can provide public access to coastal waters (if public or semi-public) -economic impact (also can encourage adjacent commercial establishments)	-precludes many other on-site uses & can affect use of adjacent areas -type of recreation available to public -can provide public access to coastal waters (if public or semi-public) -economic impact (also can encourage adjacent commercial establishments)
Active Recreation Parks / Areas		-possible additional sediment caused by construction or loss of vegetation	-construction of facilities may eliminate or damage flora/fauna habitat	-onsite loss of vegetation could accentuate erosion -any additional sediment resulting from this use could affect accretion patterns	-visual impact of recreation facilities and people -noise from influx of people -can provide public access to coastal waters (if public or semi-public) -economic impact (also can encourage adjacent commercial establishments)	-precludes many other on-site uses & can affect use of adjacent areas -type of recreation available to public -can provide public access to coastal waters (if public or semi-public) -economic impact (also can encourage adjacent commercial establishments)
Passive Recreation Parks / Areas			-any construction (i.e. paths, parking areas) could eliminate or damage flora/fauna habitat	-any onsite construction and loss of vegetation could accentuate erosion	-visual impact of people (could be some noise)	-precludes other intensive onsite uses -type of recreation available to public -can provide public access to coastal waters

Type of Impact on Coastal Waters

LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
Private Docking Facilities	-construction of docks (depending on type & length) can have an affect on circulation	-possible leakage of some oil/gas from boat motors -some bottom sediment could be stirred up during construction	-possible loss of some littoral zone habitat due to construction	-depending on location and type of construction, dock facility could affect littoral erosion/accretion patterns	-visual impact of facilities -potential noise from motor boats, people	-provides adjacent land owners with water-oriented recreational opportunities (i.e. boating, fishing) -can preclude certain water uses in immediate vicinity of docks -can increase value of adjacent land
OTHER PUBLIC/ SEMI-PUBLIC USES Water Supply	-large water intakes (i.e. Sturgeon Point, City of Buffalo) would have some impact on volume with possible affects on circulation and flow		-large intake lines may disturb spawning activities	-depending on location and design of plant, shoreline could be significantly altered	-visual impact of facilities -noise from plant operation	-provides a source of fresh water for the community -economic impact (i.e. taxes, tax base, property values) -affects access to shoreline
Sewage Treatment Facilities	-large outfalls can have some impact on volume with possible affects on circulation and flow -by pass can affect turbidity	-improperly treated sewage will increase nutrient loading, affect pH and lower dissolved oxygen	-large outfall lines may disrupt spawning activities -discharge can affect the ecosystem -any by-pass discharge can have a significant negative impact on fish, wildlife and man (health hazard)	-significantly alter shoreline with physical plant -can change accretion patterns	-visual impact of facilities -possible odor problems -possible noise from operation of plant	-location near large body of water is desirable-- affects access -economic impact (i.e. taxes, land values, etc.) -negative psychological impact -community benefit and probable overall improvement of water quality
Solid Waste Disposal	-disposal in shorelands can affect shoreline characteristics and therefore impact on circulation and flow		-leachate can be detrimental to ecosystem -wildlife habitat and spawning grounds can be affected	-significant alteration of shoreline can affect erosion/accretion patterns -construction or disposal activities can increase sheet erosion	-can be aesthetically unpleasing -possible odor problems -possible noise from machines	-limits access to shoreline during disposal -limits use of land including the use of terminated site -lowers surrounding property values
Control Structures for Natural Protection (i.e. Erosion and Flood Control)	-can constrict and affect flow -can alter circulation -can affect volume through impacts on flood discharges	-possible changes in aeration of water especially in embayments and inlets -possible additional sediment caused by construction or loss of vegetation	-can alter fish and wildlife habitat (possible loss of certain species in the control structure area)	-can significantly reduce shoreline erosion depending on type, could affect accretion patterns	-control structures usually are cold and unimaginative leaving often a barren landscape (visual impact)	-can reduce property damage and protect lives during floods, storms, etc. -provides jobs during construction -can affect public access (can be positive) -economic impact (i.e. taxes, property values)
Educational/Research Centers	-any centers involving construction in the water or alteration of the shoreline can affect flow and circulation	-depending on the type of research undertaken, chemical contamination may occur from leaks or accidents -possible additional sediment from construction or loss of vegetation	-possible loss of wildlife habitat -influx of people could affect wildlife and vegetation	-depending on type of construction, some alteration of accretion and erosion patterns may result	-visual impact of the facilities -noise and other aesthetic impacts may occur from an influx of people	-provides educational benefits to community -economic impact (i.e. tax base, property values, etc.)

Type of Impact on Coastal Waters

LAND AND WATER USES

LAND AND WATER USES	PHYSICAL	CHEMICAL	BIOLOGICAL	LITTORAL	AESTHETIC	SOCIOECONOMIC
Other Public/Semi-Public Uses	-physical structures may affect flow and circulation patterns -increased runoff would have a minor affect on water volume or flow	-possible impact of waste effluent or septic tank seepage (if no public sewers) -sheet erosion could increase the load of sediment	-possible loss of wildlife habitat -influx of people could affect wildlife and vegetation	-depending on type of construction, some alteration of accretion and erosion patterns may result	-visual impact of the facilities -noise and other aesthetic impacts may occur from an influx of people	-provides needed public facilities for shoreline community -economic impact (i. e. loss of tax base, affect on taxes and property values)
Agriculture	-possible increase in storm runoff into coastal waters	-may have additional nutrients from fertilizer and biological waste -sheet erosion could increase the load of sediment	-loss of wildlife habitat -nutrients from runoff will increase algae and affect fish/wildlife habitat -possibility of increased sediment	-agricultural practices can significantly affect sheet erosion on land and accretion patterns in streams and coastal waters (from increased sediment) -provides habitat for flora/fauna -vegetation can affect erosion patterns	-maintains open space adjacent to coast (positive impact) -possible minor impacts of noise and dust	-economic benefit -provides food source -affects public access if adjacent to shoreline
Natural Area		-vegetation in natural areas will minimize sedimentation from runoff	-provides habitat for flora/fauna		-positive aesthetic impact due to preservation of natural character	-can increase adjacent property values -may provide access to shoreline -provides positive psychological impact to shoreline users

ERIE AND NIAGARA COUNTIES REGIONAL PLANNING BOARD

MEMORANDUM

ATTACHMENT 3

FROM T. Dearing DATE 1/6/77
TO J. Rasey
SUBJECT Coastal Zone Breakdown into Urban, Rural and Semi-Urban Sectors
FILE

The attached matrix summarizes the data used in determining a workable breakdown of the coastal zone into three sectors. These include Urban, Semi-Urban, and Rural. The definition of each sector is outlined below.

1. Urban
 - o Waterfronts characterized by dense industrial, commercial residential or water transportation activities.
 - o The area landward of the waterfront is characterized by dense industrial, commercial or residential development.
2. Semi-Urban
 - o Waterfronts adjacent to urban sectors which reflect strip waterfront development (e. g. residential, commercial, recreation)
 - o The area landward of the waterfront is characterized by an abrupt change to scattered residential or commercial uses and agricultural use.
 - o Small waterfronts within Villages or hamlets which reflect concentrated land/water uses.
3. Rural
 - o Waterfronts characterized by scattered residential uses, agricultural land or recreation sites.
 - o The area landward of the waterfront is characterized by agricultural uses or vacant land.

It should be noted that the distinction between rural and semi-urban sectors was often difficult to determine. In such cases, the area was reviewed relative to:

- a) The proximity to urban or developing areas
- b) The projected land use for 1990 which was illustrated in the 1990 Projected Land Use Map as prepared by 208. This reflected those areas which would have sewer service by 1990 and provided a good indication of where development would occur.

Attachment 3 (Cont.)

The chart identifies various land/water uses characteristics for each coastal municipality (i. e. municipal waterfront strip). Such characteristics include the following:

- a) Existing land/water use for area landward of the initial waterfront strip
- b) Existing land/water use
- c) Projected land/water use
- d) Projected land/water use for area landward of the initial waterfront strip

Under each column are listed numerous land/water use classifications. The numerical list denotes those uses which are dominant in a particular area. The final column identifies the land/water use classification for the corresponding waterfront strip. Such a classification is based on the information shown on the previous four columns.

TD:ch

COASTAL ZONE MANAGEMENT: LAND/WATER USE SECTOR ANALYSIS

MUNICIPALITY	LAND USE ADJACENT TO AREA		PROJECTED LAND USE		PROJECTED LAND USE ADJACENT TO AREA		CLASSIFICATION
	EXISTING LAND USE						
1. Somerset	1. Rural 2. Low Density Residential	1. Rural	1. Rural 2. Low Density Residential	1. Rural 2. Low Density Residential	1. Rural	Rural	
2. Newfane	1. Rural 2. Low Density Residential	1. Rural	1. Rural 2. Low Density Residential	1. Rural 2. Low Density Residential	1. Rural	Rural	
3. Olcott (Hamlet)	1. High/Medium Density Residential 2. Recreation 3. Commercial	1. Rural 2. Commercial 3. Low Density Residential	1. Low Density Residential 2. Recreation 3. Commercial	1. Low Density Residential 2. Recreation 3. Commercial	1. Rural 2. Commercial 3. Low Density Residential	Semi-Urban	
4. Town of Wilson	1. Low Density Residential 2. Rural	1. Rural	1. Rural	1. Rural	1. Rural	Rural	
5. Village of Wilson	1. Low Density Residential	1. High/Medium Density Residential 2. Vacant	1. Low Density Residential	1. Low Density Residential	1. Medium Density Residential 2. Low Density Residential	Semi-Urban	
6. Porter (Lake Ontario Shoreline)	1. Low Density Residential 2. Rural 3. Recreation	1. Rural	1. Low Density Residential 2. Rural 3. Recreation	1. Low Density Residential 2. Rural 3. Recreation	1. Low Density Residential 2. Rural 3. Recreation	Rural	
7. Porter (Niagara River)	1. Low Density Residential 2. Recreation 3. Rural	1. Rural	1. Low Density Residential 2. Recreation 3. Rural	1. Low Density Residential 2. Recreation	1. Low Density Residential 2. Rural	Semi-Urban	

COASTAL ZONE MANAGEMENT: LAND/WATER USE SECTOR ANALYSIS

MUNICIPALITY	EXISTING LAND USE	LAND USE ADJACENT TO AREA	PROJECTED LAND USE	PROJECTED LAND USE ADJACENT TO AREA	CLASSIFICATION
8. Village of Youngstown	1. High/Medium Density Residential 2. Commercial	1. High/Medium Density Residential 2. Low Density Residential	1. Medium Density Residential 2. Commercial	1. Medium Density Residential	Semi-Urban
9. Town of Lewiston	1. Open Space	1. High/Medium Density Residential 2. Open Space 3. Industrial	1. Open Space	1. Medium Density Residential 2. Open Space	Semi-Urban
10. Village of Lewiston	1. High/Medium Density Residential 2. Low Density Residential 3. Recreation	1. High/Medium Density Residential 2. Commercial	1. Medium Density Residential 2. Recreation	1. Medium Density Residential 2. Commercial	Semi-Urban
11. Niagara Falls	1. Recreation 2. Transportation 3. High/Medium Density Residential	1. High/Medium Density Residential 2. Industrial 3. Commercial	1. Recreation 2. Transportation 3. High/Medium Density Residential	1. High Density Residential 2. Industrial 3. Commercial	Urban
12. Wheatfield	1. High/Medium Density Residential 2. Vacant	1. Agriculture	1. Low Density Residential	1. Low Density Residential	Semi-Urban
13. North Tonawanda	1. Industrial 2. Recreation	1. Commercial 2. High/Medium Residential	1. Industrial 2. Recreation	1. Medium Density Residential 2. Commercial	Urban
14. City of Tonawanda	1. Recreation 2. Commercial	1. High/Medium Density Residential 2. Commercial	1. Recreation 2. Commercial	1. Medium Density Residential 2. High Density Residential	Urban

COASTAL ZONE MANAGEMENT: LAND/WATER USE SECTOR ANALYSIS

MUNICIPALITY	EXISTING LAND USE	LAND USE ADJACENT TO AREA		PROJECTED LAND USE		PROJECTED LAND USE ADJACENT TO AREA		CLASSIFICATION
15. Grand Island	1. Low Density Residential 2. Recreation	1. Rural	1. Rural 2. Recreation	1. Rural 2. Recreation	1. Rural 2. Low Density Residential	1. Rural 2. Low Density Residential		Rural
16. Town of Tonawanda	1. Industrial	1. Industrial 2. High/Medium Density Residential	1. Industrial	1. Industrial	1. Industrial 2. High/Medium Density Residential	1. Industrial 2. High/Medium Density Residential		Urban
17. Lackawanna	1. Industrial	1. Industrial 2. High/Medium Density Residential	1. Industrial	1. Industrial	1. Industrial 2. High/Medium Density Residential	1. Industrial 2. High/Medium Density Residential		Urban
18. Town of Hamburg	1. High/Medium Density Residential 2. Low Density Residential	1. Rural 2. Recreation 3. Residential	1. Low Density Residential 2. Medium Density Residential	1. Low Density Residential 2. Medium Density Residential	1. Low Density Residential 2. Rural	1. Low Density Residential 2. Rural		Semi-Urban
19. Evans	1. Low Density Residential 2. High Density Residential 3. Recreation	1. Rural	1. Low Density Residential 2. Recreation	1. Low Density Residential 2. Recreation	1. Low Density Residential 2. Rural	1. Low Density Residential 2. Rural		Semi-Urban
20. Brant	1. Low Density Residential	1. Rural 2. Low Density Residential	1. Rural 2. Recreation	1. Rural 2. Recreation	1. Rural	1. Rural		Rural

ATTACHMENT 4
FEDERAL, STATE, REGIONAL, COUNTY,
AND LOCAL PLANNING DOCUMENTS

The following identified all applicable local, county, regional, and federal planning reports which make specific recommendations relative to the Geographic Areas of Particular Concern. In addition, a brief synopsis is included which outlines the area recommendations contained in each document. It should be emphasized that such recommendations formed the main criteria pertinent to setting land/water use priorities for each geographic area of particular concern.

A. LAKE ONTARIO

1. OLCOTT HARBOR

a. Town of Newfane Master Plan (1970) - Within the GAPC boundaries, the major land uses identified in the Newfane Master Plan include Marine Business and Public/Semi-Public Buildings. In addition, open space strips are identified adjacent to Eighteenmile Creek.

b. ENCRPB Open Space Preservation Plan for Eighteenmile Creek, Niagara County - The above report proposes a marine-business district for the GAPC and various open space areas within the GAPC boundaries.

2. WILSON-TUSCARORA BAY

a. Town of Wilson-Master Plan (1966) - The major land uses identified includes residential, harbor commercial, parkland and quasi-public classifications.

3. WILSON-TUSCARORA STATE PARK

a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed recreation uses were identified for Wilson-Tuscarora State Park: athletic sports, beach, boating, camping, picnicking, hunting, fishing, nature study.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing recreation uses were identified for Wilson-Tuscarora State Park: fishing, snowmobile trails. In addition, marina and swimming facilities are recognized in the NFSP&RC Long Range Plan Map for Wilson-Tuscarora Bay State Park.

4. GOLDEN HILL STATE PARK

a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed recreation uses were identified for Golden Hill State Park: athletic sports, beach, boating, camping, picnicking, bicycling, snowmobiling, fishing, hiking, nature study, zoo/museum, historical.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing recreation uses were identified for Golden Hill State Park: camping, fishing, play fields, snowmobile trails. In addition, marina facilities were recognized as a future use in the long range NFSP&RC map for Golden Hill State Park.

5. FOUR MILE CREEK STATE PARK

a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed recreation uses were identified for Four Mile Creek State Park: athletic sports, boating, camping, picnicking, fishing.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing recreation uses were identified for Four Mile Creek State Park: camping, fishing, play fields, snowmobile trails.

B. LOWER NIAGARA RIVER

1. FORT NIAGARA STATE PARK

a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed recreation uses are identified for Fort Niagara State Park: athletic sports, beach, pool, boating, picnicking, sledding, ice skating, fishing, historical, tourism.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses identified include: refreshment stand, picnicking, bathing, boat launch site, athletic sporting facilities, ice skating, sledding, snowmobile trails.

2. YOUNGSTOWN HARBOR

a. Village of Youngstown Master Plan (1972) - The following land uses were identified in the Youngstown Master Plan for the Youngstown Harbor GAPC: high and low density residential, commercial, public and quasi-public, and open space buffer areas.

b. Village of Youngstown-Master Plan-Summary Report (1974) - The following land uses were identified high/medium density residential, open space, commercial, public/quasi-public. It should be noted that for comparison purposes the medium density residential classification in the Youngstown Master Plan is within the CZM low density classification. Therefore, low density residential use represents a high priority land use within the priority use matrix.

c. ENCRPB Adopted Niagara River Environmental Plan - Recommendations include increasing the historic district potential of the Village of Youngstown.

3. LOWER RIVER COASTAL AREA BETWEEN THE VILLAGES OF YOUNGSTOWN AND LEWISTON

a. Town of Porter Master Plan (1966) - The area is classified as rural residential.

b. Town of Lewiston Master Plan (1970) - The area is classified as park/open space and medium density residential. It should be noted that for comparison purposes the medium density residential classification in the Town of Lewiston Master Plan is within the CZM low density classification. Therefore, low density residential use represents a high priority land use within the priority use matrix.

4. CHEMTROL - Specific planning documents were not available relative to this site.

5. JOSEPH DAVIS STATE PARK

a. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The following existing and proposed recreation uses are identified for Joseph Davis State Park: pool, boating, picnicking, golfing, fishing.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The existing uses identified include: refreshment stand, picnicking, pool, fishing, ice skating, snowmobile trails.

c. Adopted ENCRPB Niagara River Environmental Plan (1975) - A marina is recommended for Joseph Davis State Park.

6. LEWISTON ART PARK

a. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The following existing and proposed recreation uses are

identified for Lewiston Are Park: boating, camping, picnicking, bicycling, sledding, fishing, nature study, historical, tourist.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The existing uses identified include: refreshment stand, picnicking, fishing, nature trail.

7. PASNY FACILITIES

a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed uses were identified: athletic sports, pool, picnicking, bicycling, sledding, skiing, ice skating, snowmobiling.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses were identified: picnicking, athletic fields, sled-toboggan, snowmobile trails.

c. Town of Lewiston Master Plan (1970) - Recommended land uses include public/quasi-public and park/open space.

d. Adopted ENCRPB Niagara River Environmental Plan (1975) - The uses identified include: open space, pedestrian mover system, and existing parkways/scenic roads. In addition, vertical access to the base of the power facilities and gorge trails was recognized as a needed public access vehicle.

8. STELLA NIAGARA DRIFT AREA - Specific planning documents were not available relative to this area.

9. DEVIL'S HOLE STATE PARK

a. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The following existing and proposed uses are identified: picnicking, bicycling, hiking, historical, tourist.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses were identified: picnicking, hiking/nature trails.

c. Adopted ENCRPB Niagara River Environmental Plan (1975) - The uses identified include: open space, pedestrian mover system, and existing parkways/scenic roads. In addition, vertical access to the gorge is recognized as a needed transportation use.

10. WHIRLPOOL STATE PARK

a. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The following existing and proposed uses are identified: picnicking, bicycling, hiking, tourist.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses were identified: picnicking, hiking/nature trails, play fields.

c. Adopted ENCRPB Niagara River Environmental Plan (1975) - The uses identified include open space, pedestrian mover system, and existing parkways/scenic roads. In addition, vertical access to the gorge is recognized as a needed transportation use.

d. City of Niagara Falls Master Plan (1968) - The uses identified include: park/open space activities adjacent to the Robert Moses Parkway.

11. NIAGARA GORGE

a. City of Niagara Falls Master Plan (1968) - The uses identified include: park/open space activities adjacent to the Robert Moses Parkway.

C. UPPER NIAGARA RIVER

1. NIAGARA RESERVATION STATE PARK

a. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The following existing and proposed uses are identified: picnicking, bicycling, hiking, zoo/museum, historical, tourist.

b. New York State Parks and Recreation-A Guide to Outdoor Recreation in New York State - The following uses were identified: refreshment stand, restaurant, picnicking, hiking/nature trails.

c. Adopted ENCRPB Niagara River Environmental Plan (1975) - The uses identified include: tourist, open space, pedestrian mover system and existing parkway.

2. PASNY WATER INTAKES

a. Adopted ENCRPB Niagara River Environmental Plan (1975) - The uses identified include open space and an existing parkway.

b. City of Niagara Falls Master Plan (1968) - Open space and Robert Moses Parkway.

c. ENCRPB Upper Niagara River Recreation Study (1976) - The study recommends picnicking, fishing and hiking uses be utilized adjacent to the Intakes. In addition, the report suggests closing one lane of the Parkway to through traffic. This would be feasible if the proposed east-west expressway north of the present Robert Moses Parkway were constructed. In the event a parkway lane is removed, the study proposes building an at-grade access road across the Parkway. It would extend from Buffalo Avenue to the water intake site.

3. GRIFFON PARK AND EXTENSION

a. City of Niagara Falls Master Plan (1968) - Recommended uses include Griffon Park Extension.

b. ENCRPB Adopted Niagara River Environmental Plan (1975) - The plan recommends open space within Griffon Park and the proposed extension.

c. ENCRPB Upper Niagara River Recreation Study (1976) - The study recommends that the Griffon Park be extended to the Town of Wheatfield/City of Niagara Falls boundary line. It is suggested that development of the park extension include facilities such as boat launching ramps, a boat mooring area, picnic tables and pavilions, and athletic sport facilities. In addition, the study recommends that the site be designed and landscaped to provide opportunities for fishing, bicycling and passive recreation.

4. LOVE ROAD CANAL - Specific planning documents were not available relative to this area.

5. CITY OF NORTH TONAWANDA COASTAL OPEN SPACE AREA

a. City of North Tonawanda Master Plan (1971, not adopted) - The above report recommends open space development along the entire North Tonawanda Riverfront. Such a recommendation encompasses the GAPC under discussion.

b. ENCRPB Adopted Niagara River Environmental Plan (1975) - The study recommends an open space corridor along the City of North Tonawanda's riverfront.

c. ENCRPB Upper Niagara River Recreation Study (1976) - The study recommends extending Gratwick Park both to the north and south. Recreation uses would include picnicking, boating, fishing, and bicycling. Furthermore, the existing Niagara River Yacht Club is recommended to remain in its present use.

6. TONAWANDA ISLAND

- a. City of North Tonawanda Master Plan (1971, not adopted) - The study recommends industrial use for Tonawanda Island.
- b. ENCRPB Adopted Niagara River Environmental Plan (1975) - The plan recommends Tonawanda Island become an industrial renewal area. Specific land use problems cited in the report included: public access to the water bodies due to poor industrial design, industrial structures create unpleasant "gateway" to Tonawanda Creek and Erie Canal.
- c. ENCRPB Upper Niagara River Recreation Study (1976) - The study recommends that Tonawanda Island remain predominantly industrial. However, the plan suggests a long range redevelopment plan for the Island. Such a plan may encourage well designed water-oriented industry and possibly residential units which utilize the shoreline for public open space.

7. TONAWANDA BARGE CANAL

- a. City of North Tonawanda Master Plan (1971, not adopted) - The plan identifies the area within North Tonawanda as industrial.
- b. City of Tonawanda Master Plan (1975, not adopted) - The Master Plan identifies the GAPC area within the City of Tonawanda as central business district (CBD) commercial and general commercial. The City Hall complex is also recognized as an existing public use. Furthermore, the northwest tip of the GAPC in Tonawanda is proposed as a combined residential/commercial area.
- c. ENCRPB Adopted Niagara River Environmental Plan (1975) - The area within the City of North Tonawanda is identified as open space. The City of Tonawanda section is recognized as open space and as a part of the CBD. A marina is also identified within this area.
- d. ENCRPB Upper Niagara River Recreation Study (1976) - For the City of North Tonawanda, the study proposes a marine-oriented commercial district. Existing marinas, boat sales, and marine repair facilities would form the nucleus for the development. This proposal includes the land area west of River Road. It does not pertain to the GAPC area adjacent to the Barge Canal.

For the City of Tonawanda, the study proposes the development of a multi-story residential structure on the former Continental Can site. This site is situated on the northwest tip of the GAPC within Tonawanda. Continuous trailways are also recommended along the Barge Canal.

e. ENCRPB Barge Canal Recreation and Open Space Preservation Plan (1973) - The plan proposes increased open space within the GAPC boundaries. Increased emphasis on the history of the canal is also proposed.

8. TWO MILE CREEK

a. City of Tonawanda Master Plan (1975, not adopted) - The City's Master Plan proposes a linear park along that portion of the creek.

b. ENCRPB Upper Niagara River Recreation Study (1976) - The study proposes a linear park along Two Mile Creek by Erie County and construction of a bikeway connecting Isle View and Niawanda Parks with Sheridan Park.

c. Erie County Parks and Recreation Policy Plan (1976) - The Parks Plan recommends widening of Two Mile Creek road; installation of 1.5 miles continuous bikepaths connecting Sheridan and Niawanda Parks; and development of a 19.2 acre linear open space facility.

d. United States Army Corps of Engineers: Water Resources Management Plan (1975) - The Plan recommends a bikepath along Two Mile Creek Road in the City and Town of Tonawanda. This would connect Isle View and Niawanda Parks with Sheridan Park.

e. ENCRPB Two Mile Creek Water Quality Study (1976) - The report proposes environmental enhancement of the Two Mile Creek corridor.

9. ISLE VIEW PARK AND EXTENSION

a. City of Tonawanda Master Plan (1975, not adopted) - The Master Plan identifies the existing County Park as a continued park use.

b. ENCRPB Adopted Niagara River Environmental Plan (1975) - The report proposes an open space buffer area for the land currently identified as the Isle View Park Extension. Such a buffer would separate the industrial area east of River Road from the Niagara River.

c. ENCRPB Upper Niagara River Recreation Study (1976) - The study recommends that Erie County complete the Isle View Park development. This would include the extension. Facilities would include nature trails, bikeways, access roads, picnicking and boat docking facilities.

d. Erie County Parks and Recreation Policy Plan (1975) - The Plan recognizes the expanded development of Isle View Park as a future project.

e. U.S. Army Corps of Engineers - Water Resources Management Plan (1975) - The report identifies the proposed Isle View Park expansion as a linear park.

10. STRAWBERRY ISLAND

- a. Adopted ENCRPB Niagara River Environmental Plan (1975) - The Plan proposes establishing an open space program for Strawberry Island.
- b. ENCRPB Upper Niagara River Recreation Study (1976) - Strawberry Island is recommended for limited public use as a nature preserve. It is proposed that the littoral waters be enhanced as a fish, bird and wildlife habitat. The plan does not recommend recreational uses on the Island. However, offshore stabilization structures are encouraged which will maintain the existing natural environment.
- c. U.S. Army Corps of Engineers: Water Resources Management Plan (1975) - The report recommends a ferry drop off point on Strawberry Island for fishermen. Such a ferry is part of an overall water link between numerous focal points along the Niagara River shoreline.
- d. ENCRPB The Urban River Report (1974) - The report suggests partially filling the upstream end of Strawberry Island with dredged material from the Tonawanda Channel. This could form a bathing area.

11. BUCKHORN ISLAND STATE PARK

- a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed uses are identified: horseback riding, picnicking, bicycling, fishing, nature study, wildlife management.
- b. New York State-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses are identified: picnicking, hiking trails, nature trails.
- c. Town of Grand Island Master Plan (1971) - The Plan indicates that the Town leases a 40 acre undeveloped portion of Buckhorn Island State Park from the State Parks Commission. The Plan recommends that the Town Park area in Buckhorn State Park be developed into an active and passive recreation facility. The Plan also indicated that continued recreation needs in the Buffalo area may force future development of Buckhorn State Park.

12. BEAVER ISLAND STATE PARK

- a. ENCRPB Adopted Recreation and Open Space Plan and Program (1971) - The following existing and proposed uses are identified: athletic sports, swimming, boating, picnicking, bicycling, golfing, sledding, fishing, hiking, nature study, historical.

b. New York State-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses are identified: refreshment stand, picnicking, swimming, golf, marina, boat launch site, fishing, athletic sports, sledding, snowmobile trails.

13. MOTOR ISLAND

a. ENCRPB Upper Niagara River Recreation Study (1976) - The plan recommends developing Motor Island as a boaters' haven. The facility could provide dockage, picnicking and swimming for boaters on the Niagara River. In addition, it was recommended that Motor Island be considered as a stop-off point for a future River ferry service.

b. ENCRPB The Urban River Report (1974) - The plan suggests that Motor Island could be used to provide a recreation area for boaters and a stopping point for the proposed ferry service.

D. LAKE ERIE

1. SENECA SHOALS - Specific planning documents were not available relative to this area.

2. STURGEON POINT

a. Town of Evans Master Plan (1963) - The proposed County Park is recognized within the Town Master Plan. Specific uses include a golf course and small boat facility.

b. Erie County Park and Recreation Policy Plan (1976) - Proposed recreation uses include conservation building, boating, fishing, and picnicking. The plan recommends complimentary facilities to the existing marina.

c. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The only use proposed for Sturgeon Point County Park was boating.

3. WENDT BEACH

a. Erie County Parks and Recreation Policy Plan (1976) - Proposed recommended uses include conservation building, toboggan facilities, athletic sports, picnicking, water related activities, access roads, and beach erosion control devices.

b. ENCRPB Adopted Regional and Open Space Plan and Program (1971) - Recommended and proposed uses include beach, picnicking, biking, fishing, hiking, nature study and reforestation.

4. MOUTH OF BIG SISTER CREEK

a. Town of Evans Master Plan (1963) - Recommended use identified on the Plan Map is residential.

5. EVANGOLA STATE PARK

a. New York State-A Guide to Outdoor Recreation in New York State (1976) - The following existing uses are identified: camping facilities, refreshment stand, picnicking, bathing, athletic sports, snowmobiling.

b. ENCRPB Adopted Regional Recreation and Open Space Plan and Program (1971) - The uses identified include: athletic sports, beach, boating, camping, picnicking, biking, water sports, fishing, nature study, reforestation.

6. EIGHTEEN MILE CREEK - The boundaries for the Eighteen Mile Creek GAPC have not been finalized. Therefore, an analysis of the applicable plans is not possible.

7. CATTARAUGUS CREEK - The boundaries for the Cattaraugus Creek GAPC have not been finalized. Therefore, an analysis of the applicable plans is not possible.

8. BETHLEHEM DIKE DISPOSAL - Specific planning documents were not available relative to this area.

9. WOODLAWN BEACH

a. Erie County Parks and Recreation Policy Plan (1976) - Recommended uses include water related activities and picnicking.

b. ENCRPB Adopted Regional Recreation and Open Space Plan and Program - Proposed uses include: beach, boating, picnicking, fishing, hiking, and reforestation.

E. ALL GEOGRAPHIC AREAS

1. LAKES ERIE AND ONTARIO AND THE NIAGARA RIVER - Priorities were not established for this GAPC because of the large water area within the boundary. Therefore, applicable planning documents which pertained to the entire GAPC were not consulted.

2. ALL GAPC's - It should be noted that various planning documents were reviewed relative to their general applicability to all geographic areas of particular concern. These included the following documents:

- a. ENCRPB Adopted Land Use Concept (1974)
- b. ENCRPB Residential Density Concept (1974)
- c. ENCRPB Areawide Waste Treatment Planning Study - Generalized Existing Land Use 1975 (1976)
- d. ENCRPB Areawide Waste Treatment Planning Study - Projected 1980 Land Use (1976)
- e. ENCRPB Areawide Waste Treatment Planning Study - Projected 1990 Land Use (1976)
- f. ENCRPB Areawide Waste Treatment Planning Study - Projected 2000 Land Use (1976)

ATTACHMENT 5 LAKE ONTARIO GAPC ACCEPTABLE AND PRIORITY USES

Legend

H-High Priority
M-Medium Priority
L-Low Priority

DRAFT

	RESIDENTIAL	High/Medium	Density	Low Density	Seasonal Home	Development	COMMERCIAL	Offshore Extrac- tion of Biolog- ical Resources	Onshore Extrac- tion of Biolog- ical Resources	Onshore Comm./ Business	Establishments	Concentrated Commercial Development	INDUSTRIAL	Offshore Extrac- tion of Natural Resources	Onshore Extrac- tion & Refining of Natl. Res.	Energy	Development	Communications and Utility Facilities	Other Water Related Industry	Other Non-Water Related Industry	Ind. Waste Dis- posal (solid and liquid)	TRANS- PORTATION	Shipping (Large Scale)	Port Facilities	Airport Facilities	Rail Facilities	Facilities Limited Access	Roads Access	Roads	Other Trans- Structures/ Facilities
1. Olcott Harbor			L	L	L		M	M	H	H	H			L			M	M		L			L						M	M
2. Wilson-Tuscarora Bay			H	H	H		M	M	M	H	L			M				M					L						H	M
3. Wilson-Tuscarora State Park							M	M		M				L			M		M				L						H	M
4. Golden Hill State Park							M	M		M				L			M		M				L						H	M
5. Four Mile Creek State Park							M	M		M				L			M		M				L					L	H	M

NOTE: A blank space indicates
that the Particular use is not
acceptable within the GAPC

Lake Ontario GAPC-Acceptable and Priority Uses (Continued)

	RECREATION	Marina	Facilities	Boating & Rel.	Public Launching	Sport Fishing & Rel. Public	Access Facilities	Swimming & Related Fac.	Active Recrea- tion Parks or Areas	Passive Recrea- tion Parks/ Areas	Private Docking	Facilities	OTHER PUBLIC & SEMI-PUBLIC USES	Water Supply	Facilities	Sewage Treat- ment Facilities	Solid Waste Disposal	Control Struct- ures for Natl. Proc. (i.e. flood.)	Education/Res- earch Centers	Other Public- Semi-Public Uses	AGRICUL- TURAL	NATURAL AREA
1. Olcott Harbor	H	H	H	H	H	H	M	M	M	H	H	M	M	M	L	H	H	H	M	M	M	L
2. Wilson-Tuscarora Bay	H	H	H	H	H	H	M	M	M	M	H	L	M	M	L	H	H	H	M	M	L	H
3. Wilson-Tuscarora State Park	H	H	H	H	H	H	H	H	H	H		M	M	M		H	H	H	M	M	M	M
4. Golden Hill State Park	H	H	H	H	H	H	H	H	H	H		M	M	M		H	H	H	M	M	L	L
5. Four Mile Creek State Park	M	H	H	H	H	H	L	H	H	H		M	M	M		H	H	H	M	M	M	M

3/7/77
Revised 3/31/77
Revised and Approved 5/3/77

ATTACHMENT 6
LOWER RIVER GAPC-ACCEPTABLE AND PRIORITY USES
DRAFT

Legend:

H - High Priority
M - Medium Priority
L - Low Priority

	RESIDENTIAL		COMMERCIAL		INDUSTRIAL		TRANSPORTATION		RECREATION		Access facilities															
	Density	Low Density	Seasonal Home Development	Offshore Biological Resources	Onshore Biological Resources	Onshore Commercial Establishments	Concentrated Commercial Development	Onshore Extraction of Natural Resources	Onshore Refining & Production of Natl. Res.	Energy Development	Communications Facilities and Utility Related Industry	Other Water Related Industry	Other Non-Water Related Industry	Ind. Waste Disposal (solid and liquid)	TRANS-PORTATION	Shipping (large scale)	Port Facilities	Airport Facilities	Rail Facilities	Facilities Limited Access Roads	Access Roads	Boats Other Trans./Structures/Facilities	Marina Facilities	Fishing & Sport Fishing Public Launching Facilities	Potential Access facilities	
Legend: H - High Priority M - Medium Priority L - Low Priority																										
1. Youngstown Harbor	M	H	L	L	L	H	H				M					I					L	M	M	M	H	H
2. Ft. Niagara State Park																										
3. Lower R. Scenic/Residential Coastal Area between the Villages of Youngstown & Lewiston Town of Lewiston Section - Town of Porter Section		H	L	L	L	L					M											L	M	M	H	H
4. Chemtrot		L																								
5. Joseph Davis State Park				L	L	L					M											H	M	M	H	H
6. Lewiston Art Park				L		M					M											M	M	L	M	
7. Stella Niagara Drift Area																										
8. PASNY Facilities				M						H	H									M	M	H	M	M	H	H
9. Devil's Hole State Park				L		L					M										L	M	M	H	H	H
10. Whirlpool State Park				L		L					M										L	M	M	H	H	H
Niagara River Gorge				L		L														M	L	M	M	H	H	H

****The acceptable and priority uses for Stella Niagara Drift and Chentrol GAFCS have yet to be determined.**

*Due to the varying topography and other physical features within the Lower River Coastal Area GAPC, the acceptable and priority use designations have been divided into two sub-sections.

NOTE: A blank space indicates that the particular use is not acceptable within the GAPC.

Lower River GAPC-Acceptable and Priority Uses (Continued)

	RECREATION (Continued)										USERS & SEMI-PUBLIC OTHER PUBLIC Facilities										WATER SUPPLY Facilities										Sewage Treat- ment Facilities										Solid Waste Disposal										Control Struct- ures for Natl. Flood.										Education/Res- earch Centers										Other Public- Uses										AGRICUL- TURAL										NATURAL AREA									
	Swimming & Related Fac.	Active Recrea- tion Parks or Areas	Passive Recrea- tion Parks/ Areas	Private Docking Areas	Facilities	OTHER PUBLIC	SEMI-PUBLIC	USERS	Water Supply Facilities	Sewage Treat- ment Facilities	Solid Waste Disposal	Control Struct- ures for Natl. Flood.	Education/Res- earch Centers	Other Public- Uses	AGRICUL- TURAL	NATURAL AREA																																																																																				
1. Youngstown Harbor	L	M	H	H	H				M			H	M	M		L																																																																																				
2. Ft. Niagara State Park																																																																																																				
#3. Lower R. Scenic/Resi- dential Coastal Area between the Villages of Youngstown & Lewiston - Town of Lewiston Section - Town of Porter Section	M	L	H	H	M			M		L		H	M	M																																																																																						
4. Chemtrot																																																																																																				
5. Joseph Davis State Park	H	H	H					M				H	M	M		L																																																																																				
6. Lewiston Art Park								M				H	H	M		M																																																																																				
7. Stella Niagara Drift Area																																																																																																				
8. PASNY Facilities	H	H	H					M		L		H	H	M		L																																																																																				
9. Devil's Hole State Park								M				M	M	M		M																																																																																				
10. Whirlpool State Park								M				M	M	M		M																																																																																				
11. Niagara River Gorge								M		L		M	M	M		H																																																																																				

3/7/77
3/29/77 Revised Revised and Approved 5/3/77

ATTACHMENT 7 UPPER NIAGARA GAPC-ACCEPTABLE AND PRIORITY USE DRAFT

	RESIDENTIAL	High/Medium Density	Low Density	Seasonal Home Development	COMMERCIAL	Offshore Extrac- torial Resources	Onshore Extrac- torial Resources	Onshore Comm./ Business Establishments	Concentrated Commercial Development	INDUSTRIAL	Onshore Extrac- torial Resources	Onshore Extrac- tion & Refining of Natl. Res.	Energy Development	Communications and Utility Facilities	Other Water Related Industry	Other Non-Water Related Industry	Ind. Waste Disposal (solid and liquid)	TRANS-PORTATION	Shipping	Port Facilities	Airport Facilities	Rail Facilities	Facilities Limited Access	Roads Access	Roads	Other Trans-Structures/Facilities	RECREATION	Marina Facilities	Boating & Rel. Public Launching Facilities	Sport Fishing & Rel. Public Access Facilities
1. Niagara Reservation																														
2. PASNY Water Intakes																														
3. Griffon Park and Possible Extension																														
*4. Love Road Canal																														
5. City of North Tonawanda Coastal Open Space Area																														
6. Tonawanda Island																														
7. Tonawanda Barge Canal																														
8. Two Mile Creek																														
9. Isle View Park & Extension																														
10. Strawberry Island																														
11. Buckhorn Island State Park																														
12. Beaver Island State Park																														
13. Motor Island																														

NOTE: A blank space indicates that the particular use is not acceptable within the GAPC. *The acceptable and priority uses for the Love Road Canal GAPC have yet to be identified.

Upper Niagara GAPC-Acceptable and Priority Use (continued)

	RECREATION										AGRICUL- TURAL NATURAL AREA
	(Continued)	Swimming & Related Fac.	Active Recrea- tion Parks or Areas	Passive Recrea- tion Parks/ Areas	Private Docking Facilities	OTHER PUBLIC & SEMI-PUBLIC USES	Water Supply Facilities	Sewage Treat- ment Facilities	Solid Waste Disposal	Control Struct- ures for Natl. Proc. (flood, erosion, Res- earch Centers)	Other Public- Uses
1. Niagara Reservation				M	H		M	M	M	M	H
2. PASNY Water Intakes			L	H			M			M	L
3. Griffon Park and Possible Extension		M	H	H			M		M	M	L
4. Love Road Canal											
5. City of North Tonawanda Coastal Open Space Area		M	H	H	L		M	L	H	M	L
6. Tonawanda Island		L	M	M	M		M	L	M	M	L
7. Tonawanda Barge Canal		M	M	H	H		M		M	M	L
8. Two Mile Creek		M	H	H	L		M	L	M	M	M
9. Isle View Park & Extension		M	H	H	L		M	L	M	M	L
10. Strawberry Island		H	L	H	L				H	M	H
11. Buckhorn Island State Park		L	L	H	H		M	M	M	M	H
12. Beaver Island State Park		H	H	H	H		M		M	M	L
13. Motor Island		H	L	H	H				H	M	H

3/10/77 - Revised 3/30/77
Revised and Approved 5/3/77

LAKE ERIE GAPC-PROPOSED ACCEPTABLE AND PRIORITY USE LIST
DRAFT

TT-55

Lake Erie GAPC-Proposed

LEGEND

H- High
M- Medium
L- Low
*- Acceptable Use - No
Priority

RECREATION (Continued)	Swimming & Related Fac.	Active Recrea- tion Parks or Areas	Passive Recrea- tion Parks/ Areas	Private Docking Facilities	OTHER PUBLIC & SEMI-PUBLIC USES	Water Supply Facilities	Sewage Treat- ment Facilities	Solid Waste Disposal	Control Struct- ures for Natl. Proc. (i.e. flood, erosion, flood.)	Education/Res- earch Centers	Other Public- Semi-Public Uses	AGRICUL- TURAL	NATURAL AREA
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1. Seneca Shoals
2. Sturgeon Point
3. Wendt Beach
4. Mouth Big Sister Creek
5. Evangola State Park
6. 18 Mile Creek (under study)
7. Cattaraugus Creek (deleted)
8. Bethlehem Dike Disposal
9. Woodlawn Beach
10. Coastal Waters (Lake Erie,
Niagara River, Lake Ontario)

5/3/77 - Revised and Approved

ATTACHMENT 9

NATURAL RESOURCE TYPE:

ACCEPTABLE/PRIORITY USES

The acceptable/priority uses for the natural resource types are identified on the following page. Section F (i. e. Acceptable and Priority Uses) of the report provides sample resources which represent each type category. It should be noted that various resources appear under numerous types. For example, Keg Creek in the Town of Newfane is identified as a wetland, floodplain, fish habitat, and major stream. In such situations, it can be assumed that the most strict (i. e. wetland) priority use ranking would apply when administering the CZM program within the Keg Creek area.

TJD:ms
5/17/77

RESOURCE TYPES

****The acceptable/priority uses are dependent on compliance with specific performance standards.**

Natural Resource Type: Acceptable/Priority Use (Cont'd.)

RESOURCE TYPES

RECREATION (Continued)	USES												
	Swimming & Related Fac.	Active Recrea- tion Parks or Areas	Passive Recrea- tion Parks/ Areas	Private Docking Facilities	OTHER PUBLIC & SEMI-PUBLIC USES	Water Supply Facilities	Sewage Treat- ment Facilities	Solid Waste Disposal	Control Struct- ures for Natl. Pres. (i. flood.)	Education/Res- earch Centers	Other Public- Semi-Public Uses	AGRICUL- TURAL	OPEN SPACE
1. Wetlands (includes buffer area)	M	L	H	M					M	M	M	M	H
2. Streams (includes buffer area)	H	H	H	H		M	M		M	M	M	H	H
*3. Beaches/Dunes													
4. Fish/Wildlife Habitat	M	M	H	M		M			M	M	M	M	H
5. Floodplains	M	H	H	H					H	M	M	H	H
*6. Areas Subject to Severe Coastal Erosion													
7. Agricultural Districts	M	M	M	M		M	M		M	M	M	H	M
8. Parklands	H	H	H	L		L	L		M	M	M	M	M
9. Forest Lands	M	H	H	M		L	L		M	M	M	M	H
**10. Historical/Archeological Sites													
**11. Scenic Vistas													

SECTION III

CZM LAND AND WATER USE CONFLICT AREAS

A. INTRODUCTION

1. SCOPE AND PURPOSE - The purpose of this report is to identify major existing and potential conflicts between natural resource considerations and economic or other activities in the Erie and Niagara region's coastal zone. In addition to identifying the conflicts, possible methods of resolving them are also included in the report.

The geographic scope of this study includes the offshore waters and shorelands of Erie and Niagara Counties exclusive of the City of Buffalo and the Cattaraugus Indian Reservation. The shorelands are generally defined as those lands lying along this shoreline that contain uses or activities which have a direct relationship to coastal waters. Since final coastal zone boundaries have not yet been identified, the shorelands under consideration in this report extend inland a distance of approximately two miles.

The types of natural resources considered for this report include the Regional Planning Board's CZM resource areas identified in Section II (Task 7.4 for Second Year Program). Also considered were the resource areas mapped during the Board's first and second year (Task 7.3) CZM work programs.

2. METHODOLOGY - The methodology used to identify the conflicts was to compare maps of natural resources with maps of existing and potential development for Erie and Niagara Counties. Maps of natural resources for Erie-Niagara region that were utilized included those that were completed for work tasks in the Board's first and second year CZM work programs. Also utilized were work maps of (a) the Board's resource areas identified in Task 7.4 (Second Year Program), and (b) fish/wildlife habitat areas provided by the New York State Department of Environmental Conservation.

A map of existing land use developed for ENCRPB's 208 Water Quality Program ("Generalized Existing Land Use-1975") was utilized to determine existing development. Potential development was determined from a series of three projected land use maps developed for the 208 Water Quality Program. These projected land use maps were for the years 1980, 1990, and 2000.

Information included in the report on possible methods of resolving the conflicts has been obtained from the Board's citizen participation/outreach and feedback program (Tasks 3.1 and 3.2) as well as staff knowledge. Where possible, use of the Management Program for Erie and Niagara Counties Coastal Zone has been identified as a method of resolving conflicts.

3. RELATIONSHIP TO ENCRPB CZM PROGRAM - The Board's first year CZM work included a very general analysis of potential conflicts between development and natural resource considerations. The work done during the second year provided a more detailed analysis that resulted in the identification of specific conflict areas.

The information identified for this task has been utilized for other tasks in the Board's CZM work program (i. e. Tasks 7.3 and 7.4). The conflict areas identified in this section for their natural resource values have also been delineated either as GAPC's or resource areas. Information on possible methods of resolving the conflicts will provide input into the Board's development of a recommended CZM management structure.

B. CONFLICT AREA EVALUATION

Using the above noted methodology, nine conflict areas were identified and have been described below. The first four areas identified have existing conflicts, while the other five are considered to be potential conflict areas.

Reference should also be made to Figure 1 (i. e. CZM Conflict Areas) of this section which identifies the geographic location of each area considered. The map reference for each conflict area follows the initial heading for the nine areas.

In addition to conflict identification, the following paragraphs describe possible steps toward resolving the existing and potential conflicts. These are included after each area discussion.

1. EIGHTEENMILE CREEK-TOWN OF NEWFANE, NIAGARA COUNTY (Map Reference No. : N-1)

a. Description - From its mouth upstream to the Burt Dam, Eighteenmile Creek is an extremely valuable fish/wildlife habitat area. The creek is a major salmonoid and warm water fish spawning area and provides wetland habitat for significant concentrations of migratory birds.

Conflicting with this fish/wildlife area are certain factors which impair water quality in the creek. One factor is septic tank seepage along the lower portion of the creek. Another factor is the untreated overflow from the City of Lockport's combined sewer system that is discharged into the creek during certain wet weather periods. A new sewer district is planned in the Town of Newfane that will result in the construction

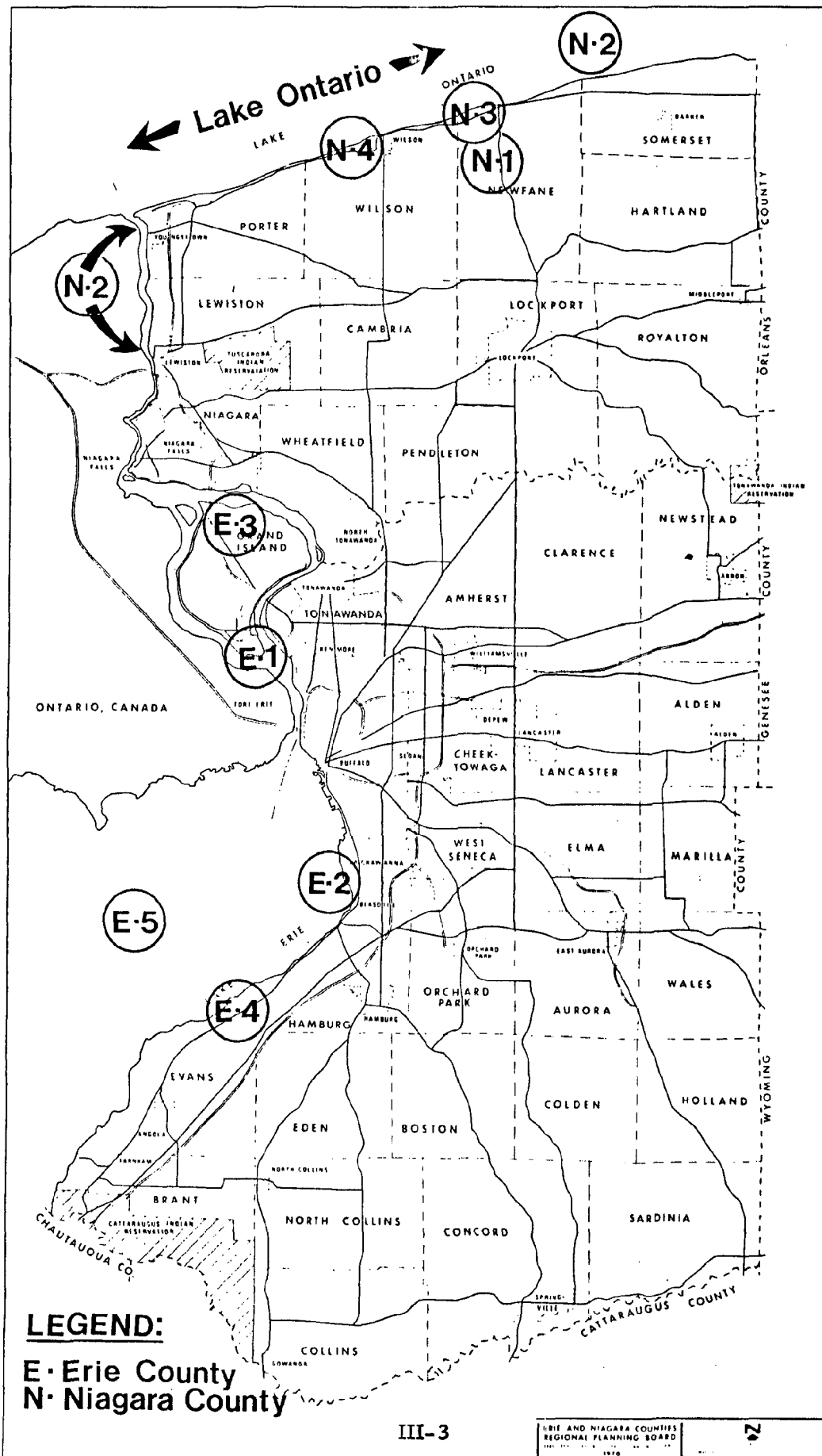


Figure 1. CZM Conflict Areas

of sewers between the Hamlets of Newfane and Olcott. While this project will help to eliminate septic tank seepage, it will also encourage additional development pressure along Eighteenmile Creek. This development pressure on the lands adjacent to Eighteenmile Creek can be considered to be a potential conflict.

b. Methods of Resolving Conflicts - Seepage from inadequate septic tank facilities along the lower reach of Eighteenmile Creek will be eliminated with the planned implementation of the Newfane Sewer District. The sewer district, however, could possibly result in developing activities that infringe on the creek and its adjacent wetland. Such infringement could be controlled through municipal zoning and enforcement of the N. Y. S. Wetlands Legislation. In addition, it is anticipated that the lower portion of the creek will be identified as a resource type in the Erie-Niagara CZM program. Such a designation would identify the specific types of uses that should (and shouldn't) occur there.

2. LOWER NIAGARA RIVER AND LAKE ONTARIO COASTAL WATERS (Map Reference No. : N-2)

a. Description - The lower Niagara River and certain offshore littoral areas of Lake Ontario provide a major fishery for trout, salmon and a variety of warm water species. This fishery has been significantly affected through discharges of the chemical mirex. The recent discovery of mirex in Lake Ontario and Lower Niagara River fish has led to a ban on the possession of several species of fish. Because of the major importance of this fishery to Niagara County (i.e. in terms of recreational and economic opportunities), this chemical contamination can significantly affect the pattern of usage for coastal lands and waters.

In addition to this existing conflict, a potential conflict of further water quality impairment exists along the Lower Niagara River. Toxic chemicals have and are being deposited at the Chemtrol site within the Town of Porter. In addition, toxic chemicals were buried on the adjacent AEC site several years ago. The potential exists for these chemicals to eventually leach into the area ground water system. If this occurs, the leachate could eventually reach the Niagara River and impair the lower river-Lake Ontario fishery. It is also proposed that a sewer line be constructed from this industrial area to the Niagara River. If this line is constructed, further impairment of water quality could occur if the industrial waste products are not adequately treated.

b. Methods of Resolving Conflicts - At the current time, no feasible methods have been identified to eliminate mirex already in the Lower Niagara River and Lake Ontario. Improved water quality monitoring, however, could help to more quickly identify the presence of toxic substances. Once identified, the source of such discharges could be located and eliminated.

In conjunction with improved monitoring, enforcement of standards necessary to achieve desired water quality goals will be required. These issues are currently being addressed in the 208 Water Quality Program now underway in the Erie-Niagara region.

As part of this region's CZM program, several areas having a relationship to water quality in the Lower Niagara-Lake Ontario area have been identified as preliminary geographic areas of particular concern (GAPC's). These areas include the coastal waters, the Chemtrol site, and the Lower Niagara Coastal Area (and are described in the report for Task 7.3, Second Year Program). Through the identification of permissible/priority uses and performance standards, the CZM program could help to preserve/improve water quality in this area.

3. STRAWBERRY/MOTOR ISLAND FISHERY-TOWNS OF TONAWANDA AND GRAND ISLAND, ERIE COUNTY (Map Reference No.: E-1)

a. Description - The East Branch of the Niagara River extending from Strawberry Island to the South Grand Island Bridge is a major fish spawning and habitat area. The littoral areas off Strawberry Island are known to be a spawning ground for muskellunge as well as many other species of fish.

Conflicting with this fishery are occasional influxes of pollutants from the industrial area extending along the east shore of the river. These pollutants have been discharged into the river as a result of oil spills and runoff from the industrial land. In addition, possible increases in shipping from a proposed expansion of the NYS Barge Canal or from a proposed All American Canal could intensify this conflict.

b. Methods of Resolving Conflicts - As with the Lower Niagara/Lake Ontario coastal waters, the 208 Water Quality Program currently underway will be addressing water quality issues in this area. Such things as oil spills and runoff from the adjacent industrial area will be monitored. As a result of this 208 study methods of preserving/improving water quality will be identified.

Both Strawberry and Motor Islands have been identified as preliminary GAPC's in the CZM program for this region. Through the identification of permissible/priority uses and performance standards for these GAPC's, their protection as a valuable fishery area can be emphasized.

4. WOODLAWN BEACH-TOWN OF HAMBURG, ERIE COUNTY
(Map Reference No.: E-2)

a. Description - At one time an excellent natural sand beach, the Woodlawn Beach property was purchased in the early 1900's for industrial expansion by the Bethlehem Steel Corporation. Part of the property was

subsequently used as a disposal site for slag from the adjacent steel plant. The property currently is partially a natural area with other portions of the site being covered by sludge and debris. The site does provide a habitat for migratory birds. In addition to the existing conflict with industrial expansion, the beach property is traversed by Rush Creek which receives the effluent from two sewage treatment plants. These two factors would inhibit use of this property as a natural beach area.

b. Methods of Resolving Conflicts - The identification of Woodlawn Beach as a GAPC involved a considerable amount of interest and discussion at Lake Erie CZM work group meetings. As a result, a special citizens' committee was formed to solicit input from area residents. This committee provided an opportunity for direct dialogue between the residents and officials/staff from the Bethlehem Steel Corporation, Erie County, Town of Hamburg and the Regional Planning Board. These citizen committee meetings have been further discussed as part of Task 7.3. It is anticipated that continuation of this dialogue and coordination will be utilized for any implementation plans.

Possible projects that have been discussed for Woodlawn Beach include public acquisition, restoration of the natural beach and preservation of its natural features, removal of debris, and development of some recreational facilities. These projects would restore and improve the natural amenities of the property as well as improve recreational opportunities. In conjunction with these projects, completion of the planned Southtowns sewerage system should improve water quality in this area and thereby further enhance recreational opportunities.

5. NEWFANE-HARTLAND AGRICULTURAL DISTRICT-TOWN OF NEWFANE, NIAGARA COUNTY (Map Reference No.: N-3)

a. Description - A portion of the Newfane-Hartland Agricultural District lies just west of the Hamlet of Olcott between Route 18 and Lake Ontario. A potential conflict exists from planned sewer lines that would traverse this area as part of the proposed Newfane Sewer District. The sewer lines would serve existing development along Route 18 and the lake-shore. Although the agricultural district includes only the farming land between these two developed areas, the existence of sewers would create development pressure on the district.

b. Methods of Resolving Conflicts - Planned sewer lines for the Newfane sewerage system (Sewer District No. 2 and 3) do cross portions of the Newfane-Hartland Agricultural District. In order to prevent land use changes to non-agricultural usage, the Town of Newfane's municipal

ordinances (i. e. zoning and subdivision regulations) could be utilized. In addition, the tax policies of agricultural districts (i. e. preferential assessment and rollback taxes for changes to non-agricultural uses) would help to prevent land use changes. The inclusion of agricultural districts as resource areas in the Erie-Niagara CZM program could also help to prevent land use changes by identifying allowable/priority uses and performance criteria for these areas. The status and future use of this as well as other agricultural districts would be periodically examined when the districts are up for recertification by New York State.

6. WILSON-TUSCARORA BAY-TOWN OF WILSON, NIAGARA COUNTY
(Map Reference No. : N-4)

a. Description - Wilson-Tuscarora Bay is a shallow bay and wetland area near the mouth of the East Branch of Twelvemile Creek. The bay and creek provide a major spawning and habitat area for several species of fish found in Lake Ontario. The bay and wetland also provide habitat for significant concentrations of migratory birds and waterfowl.

In addition to its importance as a fish/wildlife habitat area, the bay and creek mouth also function as a major center for boating and marina facilities. This area is one of the few natural harbor areas along the Lake Ontario shoreline. A variety of private and semi-public boating, marina and docking facilities have been developed along the bay.

Although this development has not impaired the bay's function as a fish/wildlife habitat area, the potential exists for future conflicts. Such a conflict could arise from any future development activities which impair this habitat. Any pollutants resulting from development could also negatively affect this habitat.

b. Methods of Resolving Conflicts - Through the use of governmental regulations, future construction activities in and around the bay could be controlled to prevent impairment of the fish and wetland habitat. These regulations would include municipal ordinances, NYSDEC wetland permits, and U.S. Corps of Engineers permits for construction work in navigable waters. In addition, the inclusion of the bay as a GAPC in the CZM program would reinforce these regulations by identifying allowable/priority uses and performance criteria for future activities.

7. WOODS CREEK-TOWN OF GRAND ISLAND, ERIE COUNTY
(Map Reference No. : E-3)

a. Description - Along with the other major creeks in Grand Island, Woods Creek provides a major spawning area for northern pike and other species of fish in the Niagara River. In the northern portion of Grand Island,

the land around the middle and upper reaches of Woods Creek is projected for future residential development. A potential conflict could occur if this development infringes on the stream and impairs the spawning habitat.

b. Methods of Resolving Conflicts - Through the use of municipal regulations, any future development around the upper portions of Woods Creek could be regulated to help prevent the destruction of fish habitat. Such regulations could prevent grading or excavation activities in streams and include setbacks for buildings. If the CZM boundary to be determined is extensive enough to include this portion of Woods Creek, the CZM program could reinforce these municipal regulations.

8. EIGHTEENMILE CREEK GORGE-TOWN OF HAMBURG, ERIE COUNTY
(Map Reference No.: E-4)

a. Description - In its lower reaches, Eighteenmile Creek flows through a deep and scenic gorge. The gorge cliffs in this area contain important fossil deposits that are of international significance. In addition, the creek contains spawning runs of Lake Erie trout and salmon.

The land adjacent to and near the lower reaches of this creek are projected for increased future residential development. This future development can be expected to put additional pressure on the preservation of the natural amenities (i. e. fossils, vegetation, natural open space) of the creek corridor.

b. Methods of Resolving Conflicts - As with Woodlawn Beach, the identification of the Eighteenmile Creek Gorge invoked a considerable amount of interest and discussion at Lake Erie CZM work group meetings. A special citizens' committee was formed to solicit input from area residents. In addition to the CZM program, this committee is also in the process of investigating other programs which could be used to protect the natural features of the creek corridor. These programs include negative easements and transfer of development rights.

9. LAKE ERIE-ERIE COUNTY (Map Reference No.: E-5)

a. Description - The waters of Lake Erie provide a source of drinking water for approximately two million residents of Western New York. In addition, the lake provides recreational opportunities such as swimming, boating and sport fishing. Economic activities such as commercial fishing and recreation/tourism support facilities are also dependent on the lake as a natural resource.

A potential conflict with these activities could occur if a proposal to allow gas drilling in Lake Erie is implemented. If drilling in the lake bed is allowed, the potential for incursions of oil, "wet gas" and salt into the lake waters could exist. Such incursions could affect the lake as a source of drinking water and recreation/economic opportunities.

b. Methods of Resolving Conflicts - Prior to allowing drilling under Lake Erie, the potential for any incursions of pollutants (i.e. oil, wet gas, salt, etc.) into the lake should be fully investigated. This investigation should identify any areas of the lake where oil, "wet gas" or salt could be expected. The study should also identify any potential conflicts between drilling activities and existing facilities or activities in Lake Erie (i.e. water supply intakes, shipping, fishing, boating, etc.). The Erie and Niagara Counties Regional Planning Board officially supported such a study by passing a resolution which requests that an appropriate federal agency conduct an environmental impact statement prior to allowing drilling in Lake Erie.

In recognition of the importance of coastal waters to the Erie-Niagara region, these waters have been identified as a GAPC in the regional CZM program. Permissible/priority uses and performance criteria will thus be identified for coastal waters in the regional CZM program.

C. CONCLUSION

This report has identified nine areas where current or potential conflicts exist between natural resources and development activities. The areas identified cover a variety of natural resources including fish spawning/habitat areas, wetlands, prime agricultural areas (i.e. agricultural districts), and significant natural features. Existing conflicts identified for these resource areas have been caused primarily by liquid and solid waste disposal activities. The potential conflicts identified anticipate possible problems for the resource areas as a result of projected development activities.

Part B of this section identifies various methods of resolving the above-noted conflicts. In most instances, municipal as well as existing state and federal regulations can be utilized to mitigate existing and potential conflicts. The relationship of the regional CZM program (as developed to date) to these conflicts has also been identified. It is anticipated that the CZM program will provide a forum for determining what the most appropriate solutions will be for resolving many of these conflicts. A major element of the Erie-Niagara CZM program being developed is that local citizens and government officials are involved in determining what these solutions should be.

SECTION IV

REGIONAL FACILITIES

A. INTRODUCTION

1. SCOPE AND PURPOSE - During the Second Year Coastal Zone Management (CZM) work program, the Erie and Niagara Counties Regional Planning Board (ENCRPB) collected and evaluated information relative to regional facilities in the bi-county coastal area. This effort satisfied the work requirements recognized in Task 8.10 of the ENCRPB's second year contract with New York State Department of State.

The major purpose of this section is to:

- (a) review the methodology used throughout the task
- (b) identify the regional facilities in the Erie and Niagara Counties coastal area through maps and narrative
- (c) evaluate the regional facilities relative to their impact on geographic areas of particular concern (GAPC's presented for Task 7.3

2. METHODOLOGY - The following paragraphs outline the criteria used to determine regional facilities as well as the information sources reviewed during the inventory element of Task 8.10.

a. Criteria - For the purposes of this analysis, four basic criteria were used to identify regional facilities within the bi-county coastal area. It should be noted that a strict quantitative measure was not possible due to a lack of data as well as the variety of facilities analyzed. Furthermore, a facility was not required to satisfy all the criteria in order to be classified as regional in nature. The following identifies those criteria used in the analysis:

- (1) The particular facility or project is public or quasi-public in nature and has a service area encompassing a large portion of Erie and Niagara Counties
- (2) The facility provides maximum public access to the shoreline for active and passive recreational use. Such areas are recognized as regional depending on residential location of their users.
- (3) The facility serves a major role in the economic development of the bi-county region. Such a role may encompass energy production, regional transportation routes or major employment centers.

- (4) The facility causes a major impact on the water quality within the bi-county coastal waters (i. e. Lakes Ontario and Erie, Niagara River). Such an impact may be adverse or beneficial depending on the particular operation conducted at the facility (e. g. water treatment) and the by products of the operation (e. g. effluent discharge). The major complexes which were evaluated relative to this criteria included sewage treatment plants, water treatment plants and their corresponding intake points. In addition, solid, liquid, and chemical waste disposal areas, and energy generating facilities were also evaluated. It should be noted that sewage treatment plants were recognized as regional facilities if their flow capacity or design flow capacity exceeded 10 MGD (Millions of Gallons a Day). In addition, these facilities also generally serviced more than one municipality. A water treatment plant was considered a regional facility if its design flow capacity exceeded 35 MGD.

b. Inventory - In order to identify major projects/complexes for possible designation as regional facilities, numerous planning documents and regional agencies were used as information sources. This information was inventoried during the second year CZM work program and potential regional facilities were recognized. These were then measured against the criteria indicated above. The following identified the planning documents and other information sources inventoried during Task 8.10:

- (1) ENCRPB Adopted Sanitary Sewerage Plan and Program
- (2) ENCRPB Adopted Water Supply Plan and Program
- (3) ENCRPB Adopted 1990 Regional Trafficways Classification System
- (4) ENCRPB Adopted Regional Recreation and Open Space Plan and Program
- (5) ENCRPB Adopted Storm Drainage Management Plan and Program
- (6) ENCRPB Adopted Niagara River Environmental Plan
- (7) Public Service Commission Maps of Existing and Proposed Power Plants

- (8) Telephone Conversation with Mr. Joseph Tocke,
New York State Dept. of Transportation
(June 6, 1977)
- (9) Telephone Conversation with Mr. John Seager,
Niagara Frontier State Parks and Recreation
Commission (June 6, 1977)
- (10) Telephone Conversation with Lewiston Artpark Staff
(June 7, 1977)
- (11) Inventory of Steam Electric Generating Facilities
report, New York State Dept. of Environmental
Conservation
- (12) Telephone Conversation with Mr. Gordon Foster,
Niagara Frontier Transportation Committee
(June 7, 1977)
- (13) Information developed through the ENCRPB Area-
wide Waste Treatment Management Planning Study
(208)

B. IDENTIFICATION

This subsection recognizes the regional facilities identified through the methodology outlined in Part A (2) of this section. These include both existing and proposed sites. Figures 1, 2, and 3 of this section locate the regional facilities within Erie and Niagara Counties. Due to the number of facilities identified, it was not possible to include all the complexes on one map. Therefore, Figures 1 and 2 identify sewage treatment plants and water treatment plants respectively which have been recognized as regional facilities, while Figure 3 locates the remaining regional facilities within the bi-county coastal area. The map reference number for each regional complex follows the initial heading of the facility.

1. REGIONAL FACILITIES - The following identifies the regional facilities in the bi-county coastal area and indicates the figure and corresponding map reference number which locates the facility within Erie and Niagara Counties.

a. Type: Sewage Treatment Plants

- (1) Southtowns Sewer Treatment Plant, Town of Hamburg,
Erie County (Figure 1, No. 1)
- (2) Town of Tonawanda Sewer Treatment Plant, Town of
Tonawanda, Erie County (Figure 1, No. 2)

(3) City of Niagara Falls Plant, City of Niagara Falls, Niagara County (Figure 1, No. 3)

(4) Niagara County Sewer District #1 Plant, Town of Wheatfield, Niagara County (Figure 1, No. 4)

b. Type: Water Treatment Plants

(1) Erie County Water Authority-Sturgeon Point Plant, Town of Evans, Erie County (Figure 2, No. 1)

(2) Erie County Water Authority-Woodlawn Plant, Town of Hamburg, Erie County (Figure 2, No. 2)

(3) Town of Tonawanda Plant-Town of Tonawanda, Erie County (Figure 2, No. 3)

(4) Erie County Water Authority-Jerome P. VanDeWater Plant (Figure 2, No. 4)

(5) Niagara County Water District Plant, Town of Wheatfield, Niagara County (Figure 2, No. 5)

(6) City of Niagara Falls Plant, Niagara Falls, Niagara County (Figure 2, No. 6)

c. Type: Power Generating Facilities

(1) Niagara Mohawk Huntley Station-Town of Tonawanda, Erie County (Figure 3, No. 1)

(2) Power Authority State of New York Facilities-Town of Lewiston and City of Niagara Falls, Niagara County (Figure 3, No. 2)

(3) New York State Electric and Gas Power Facility-Town of Somerset, Niagara County-Proposed Site (Figure 3, No. 3)

d. Type: Ports - There are no major ports within the Erie and Niagara Counties second year contract coastal study area (this excludes the City of Buffalo). It should be noted that the Port of Buffalo has been analyzed in the City of Buffalo's CZM program.

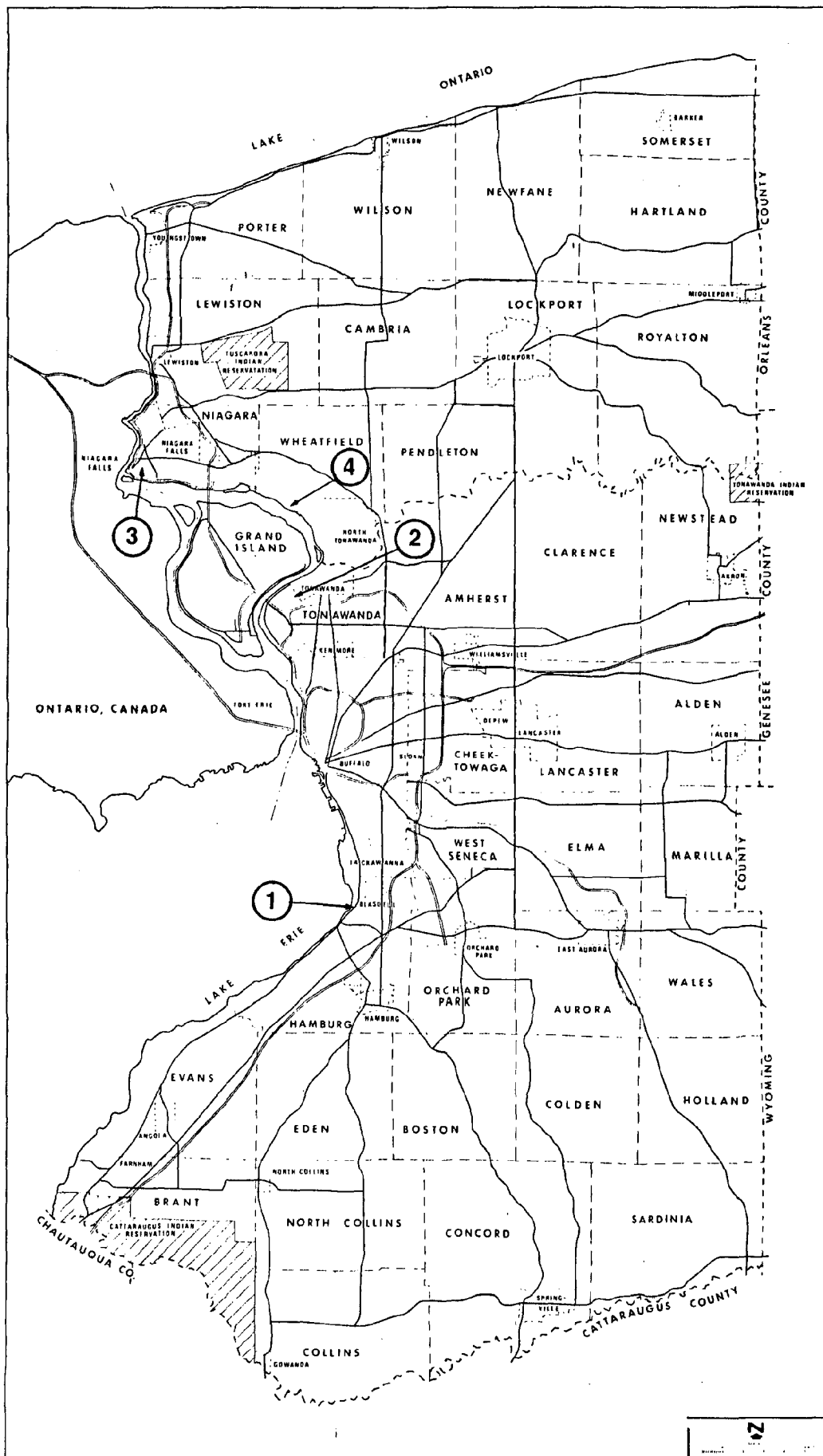
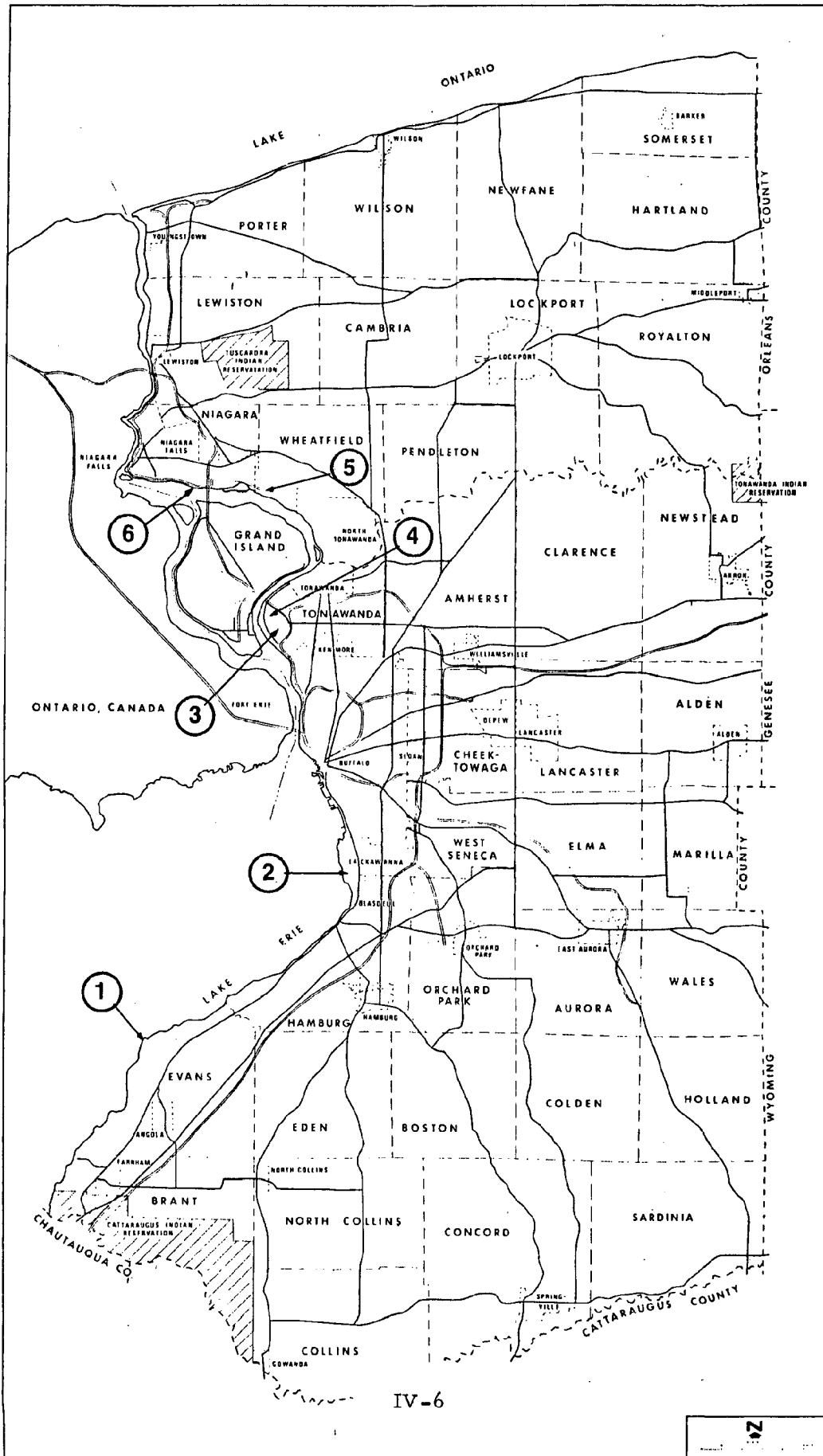


Figure 1. Regional Facilities - Sewage Treatment Plants
IV-5



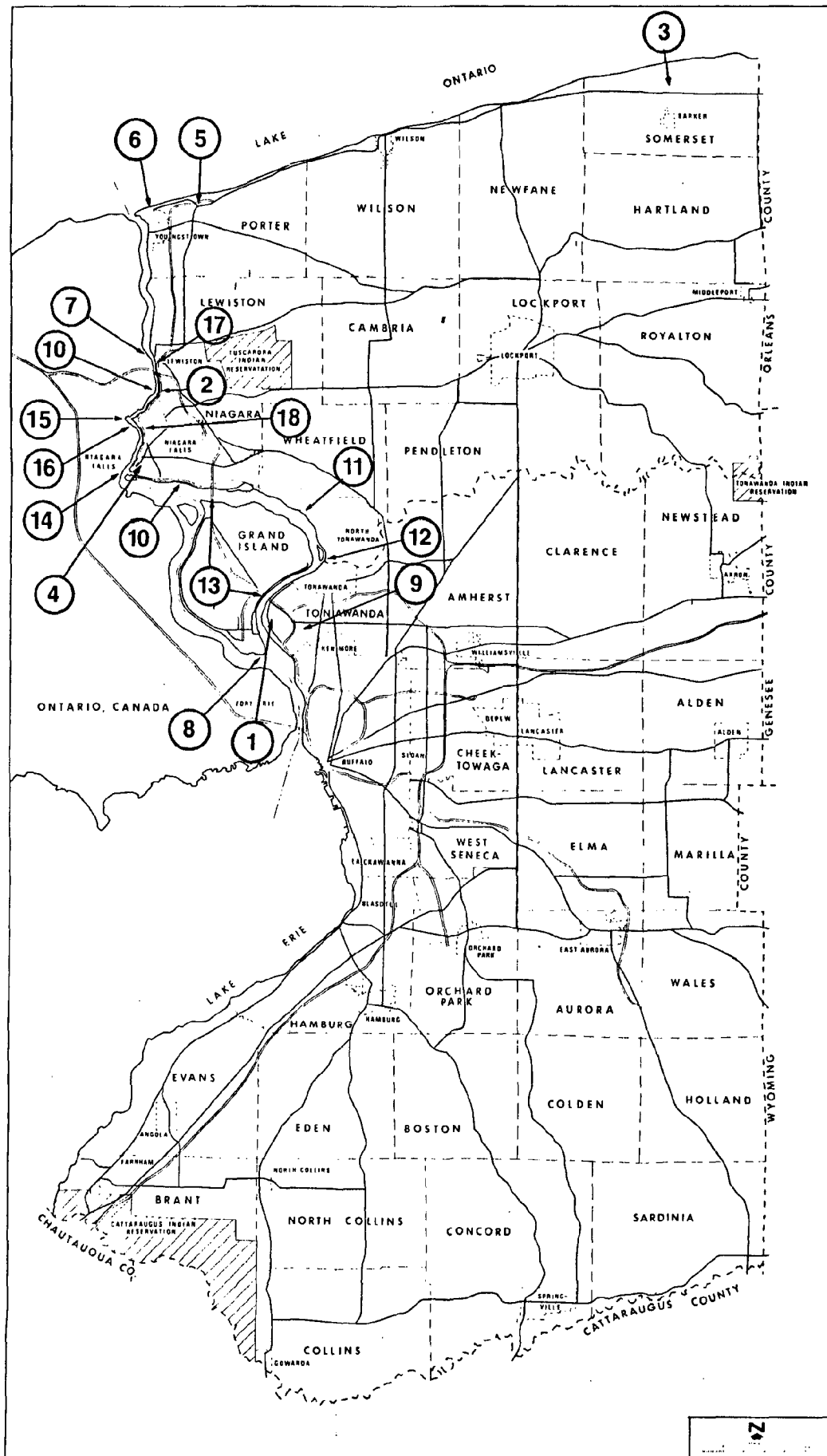


Figure 3. Other Regional Facilities

e. Type: Parks

- (1) Niagara Reservation State Park-City of Niagara Falls, Niagara County (Figure 3, No. 4)
- (2) Four Mile Creek State Park-Town of Porter, Niagara County (Figure 3, No. 5)
- (3) Fort Niagara State Park-Town of Porter, Niagara County (Figure 3, No. 6)
- (4) Lewiston Artpark-Town of Lewiston, Niagara County (Figure 3, No. 7)
- (5) Beaver Island State Park - Town of Grand Island, Erie County (Figure 3, No. 8)

f. Type: Transportation Corridors

- (1) Interstate 190 Between the Town of Tonawanda/City of Buffalo Municipal Boundary and the South Grand Island Bridges-Town of Tonawanda, Erie County (Figure 3, No. 9)
- (2) Robert Moses Parkway-City of Niagara Falls and Town of Lewiston, Niagara County (Figure 3, No. 10)
- (3) Conrail Railroad-City of North Tonawanda, Town of Wheatfield and City of Niagara Falls, Niagara County (existing facility) (Figure 3, No. 11)
- (4) Portion of New York State Barge Canal Within the City of North Tonawanda and City of Tonawanda, Erie County (proposed rejuvenation) (Figure 3, No. 12)

g. Type: Bridges

- (1) North and South Grand Island Bridges-Towns of Tonawanda and Grand Island, and City of Niagara Falls (Figure 3, No. 13)
- (2) Rainbow Bridge-City of Niagara Falls (Figure 3, No. 14)
- (3) Suspension Bridge-City of Niagara Falls (Figure 3, No. 15)

- (4) Whirlpool Bridge-City of Niagara Falls, Niagara County (Figure 3, No. 16)
- (5) Lewiston-Queenston Bridge-Town of Lewiston, Niagara County (Figure 3, No. 17)

f. Type: Transportation Terminals

- (1) Amtrack Passenger Station-City of Niagara Falls, Niagara County (Figure 3, No. 18)

3. MAPPING - The regional facilities which were identified under Task 8.10 have been included in the mapping for Task 7.3. The location of these facilities has been illustrated on the map entitled "Regional Facilities, Problem Areas, Drainage Basin Areas, and Public Water Service Areas". It is a regional map of Erie and Niagara Counties and is at a scale of 1" = 1 mile.

C. REGIONAL FACILITY EVALUATION

The following paragraphs describe each regional facility and discuss their impact on geographic areas of particular concern. Such GAPC's either include the regional facility within the boundary or the GAPC is immediately adjacent to the regional site. In addition to the GAPC impact evaluation, the regional facilities were examined to determine alternative locations. Such alternatives are included in this section only if they were identified through a specific planning or program document developed independent of the CZM program.

1. SEWAGE TREATMENT PLANTS - The sewage treatment plants identified in Figure 1 and Part C (1) of this section are analyzed collectively, due to their proximity to the water body GAPC's (i.e. Lakes Erie and Ontario, Niagara River). Such proximity causes similar impacts on the water quality within the coastal waters.

a. Description - The sewage treatment plants identified as regional facilities include the proposed Southtowns Sewer Treatment Plant, Town of Tonawanda Plant (under construction), City of Niagara Falls Plant (under construction), and the Niagara County Sewer District #1 Plant (under construction). Table 1 of this section identifies the service area of each plant, design flow capacity and indicates the compliance with state standards (i.e. Title 17 -New York State Environmental Conservation Law) for effluent removal. Reference should be made to Table 1 for a summary description of the above plants.

TABLE 1

SEWER TREATMENT PLANTS DATA*

COMPLIANCE WITH STATE
EFFLUENT STANDARDS RELA-
TIVE TO SUSPENDED SOLIDS,
PHOSPHOROUS, AMMONIA AND
BIO-CHEMICAL OXYGEN DEMAND
(BOD)***

<u>PLANT</u>	<u>SERVICE AREA</u>	<u>DESIGN FLOW CAPACITY</u>	<u>COMPLIANCE WITH STATE EFFLUENT STANDARDS RELA- TIVE TO SUSPENDED SOLIDS, PHOSPHOROUS, AMMONIA AND BIO-CHEMICAL OXYGEN DEMAND (BOD)***</u>
1. Southtowns	Towns/Villages of Ham- burg & Orchard Park (Boston, Eden, Aurora, E. Aurora, Holland may also be added) Erie County	16 MGD	Positive Compliance
2. **City of Buffalo	City of Buffalo, Town of Cheektowaga - Erie County	180 MGD	Positive Compliance
3. Town of Tonawanda	Town of Tonawanda, City of Tonawanda, Village of Kenmore-Erie County	29.6 MGD	Positive Compliance
4. Niagara County Sewer District #1	Towns of Wheatfield, Pendleton, Lockport, Cambria-Niagara County	14.1 MGD	Positive Compliance
5. City of Niagara Falls	City of Niagara Falls - Niagara County	48.1 MGD	Positive Compliance

*Source: Information obtained through the ENCRPB Areawide Waste Treatment Management Study (208)
**The City of Buffalo Plant is outside the ENCRPB second year contract study area. However, it is included
in this analysis due to its impact on the coastal waters GAPC.

***The federal standards for sewage treatment plants per Article 7 of the New York State Conservation Law
are as follows: BOD/Suspended Solids-85% or 30ppm whichever is greater
PO₄ - 1.0ppm maximum, 0.5ppm average

b. Impact on GAPC - The sewage treatment facilities impact on the water quality within the coastal waters through their effluent discharges. Due to the pollutant removal capacity of the plants, their impact would not be a major adverse problem to the coastal water body GAPC's.

It should be noted that the City of Buffalo Sewage Treatment Plant is identified in Table 1. Although Buffalo is within Erie County, the municipality has undertaken a separate CZM contract with New York State. Therefore, the City of Buffalo's coastline has been excluded from the ENCRPB's second year program. However, the Buffalo Sewer Authority Sewage Treatment Plant located on Squaw Island discharges into the Niagara River. Such a discharge impacts on the water quality downstream from the City of Buffalo and therefore causes a regional impact on the bi-county coastal water body GAPC's. This impact necessitates the inclusion of the City of Buffalo plant within this report for study purposes.

c. Alternative Locations - Alternative locations are not being considered for the sewage treatment plants identified as regional facilities within Erie and Niagara Counties.

2. WATER TREATMENT PLANTS - The water treatment plants identified in Figure 2 and Part C(1) of this section are analyzed collectively. This prevents duplication and allows a general summary.

a. Description - The water treatment plants identified as regional facilities include: Erie County Water Authority (ECWA) Sturgeon Point Plant, ECWA-Woodlawn Plant, Town of Tonawanda Plant, ECWA-Jerome P. Van DeWater Plant, Niagara County Water District Plant and the City of Niagara Falls Plant. Table 2 of this report identifies the approximate service area of each plant, and the design flow capacity. Reference should be made to Table 2 for a summary description of the above plants. It should be noted that the City of Buffalo's Water Treatment Plant is included in Table 2. This is due to the impact the plant discharge has on coastal water quality further downstream.

b. Impact on GAPC - The water treatment plants are located in close proximity to the coastal waters GAPC and exhibit various adverse impacts on those areas. The major impact pertains to the discharge of small suspended particles into these waters. The particles are removed from the water during the treatment process and return to the water body in a concentrated form. Upon reaching the lake/river, the materials decompose and reduce the oxygen content within the water as well as increase the turbidity level. A major element in alleviating this problem is a direct connection to a sewage treatment plant from the water treatment facility. This permits immediate treatment of the discharged material and prevents their direct disposal in the

coastal water body GAPC. Such connections should be encouraged at each water treatment plant.

c. Alternative Locations - Alternative locations have not been identified for the water treatment plants recognized as regional facilities within the bi-county coastal area.

3. NIAGARA MOHAWK HUNTLEY STATION

a. Description - The station is situated on the Niagara River in the Town of Tonawanda, and provides electrical service to a vast portion of western New York. The facility contains six coal-fired steam electric generating units with a total capacity of 875 MWe (i. e. mega watts of electricity). It should be noted that intakes and discharges are located at the Niagara River shore immediately adjacent to the plant.

b. Impact on GAPC - The Niagara River has been identified as a GAPC. Therefore, possible impacts relate to water quality, interrelationship of water discharge and intake points with the river littoral zone, and proper disposal of fly ash and other waste materials. Therefore, proper safeguards should be strictly enforced to control present and future environmental problems.

c. Alternative Location - The Niagara Mohawk Huntley Station is an existing facility and an alternative location is not being considered at the present time.

4. ROBERT MOSES POWER PLANT AND WATER INTAKES - POWER AUTHORITY OF STATE OF NEW YORK (PASNY)

a. Description - The Robert Moses Power Plant is located on the Niagara River east shore in the Town of Lewiston, while the water intakes are situated in the City of Niagara Falls immediately above Niagara Falls. The plant consists of an intake structure at the top of the gorge and generating equipment at the bottom connected by penstocks. A storage reservoir is also included on the site and holds extra water diverted from the Niagara River at night. The reservoir covers about 1,900 acres and has a capacity for 20 billion gallons of water.

b. Impact on GAPC - The PASNY Facilities have been identified as a geographic area of particular concern. The economic impact on the surrounding area is a significant factor in terms of energy supply and job opportunities. The power generated at the site is distributed to a vast area within New York State and serves to increase the industrial capacity of numerous metropolitan areas.

MAJOR WATER TREATMENT PLANTS*

<u>PLANT</u>	<u>GENERAL SERVICE AREA</u>	<u>DESIGN FLOW CAPACITY</u> (Millions of Gallons Per Day)
1. Erie County Water Authority-Sturgeon Point Plant	Towns of Evans, Orchard Park, Boston, and the Village of Hamburg, Erie Co.	50
2. Erie County Water Authority-Woodlawn Plant	Towns of Hamburg, Elma, Lancaster and the City of Lackawanna, Erie County	38
3. Town of Tonawanda Plant	Town of Tonawanda, Village of Kenmore, Erie County	88
4. **City of Buffalo	City of Buffalo, Erie County	160
5. Erie County Water Authority-Jerome P. Van DeWater Plant	Town of Amherst and Clarence, Erie County	50
6. Niagara County Water District Plant	Town of Wheatfield, Lockport, Pendleton, and Niagara-Niagara County	60
7. City of Niagara Falls	City of Niagara Falls, Niagara County	64

*Source: ENCRPB Adopted Regional Water Supply Plan and Program (1974)

**The City of Buffalo Plant is outside the ENCRPB study area. However, it is included in this analysis due to its impact (i.e. water quality) on the coastal waters GAPC.

The environmental impact of the plant complex pertains to the visual and hydraulic flow elements of the river. The plant is situated on the Niagara Gorge and is approximately 1,933 feet long and 389 feet high. Such facilities provide a sharp contrast to the gorge environment and the natural beauty of the area. The hydraulic flow of the Niagara River increases at the PASNY facilities. This is due to the re-entry of water into the river at the base of the generating plant. Such water had been diverted from the Niagara River immediately above the Niagara Falls at the PASNY Water Intakes. The increased river flow at this point has minor environmental impacts to the geographic area of particular concern (i. e. PASNY Facilities site).

c. Alternative Location - The Robert Moses Power facility is an existing complex and alternative locations are not being considered.

5. PROPOSED NEW YORK STATE ELECTRIC AND GAS CORPORATION - SOMERSET FACILITY

a. Description - A site along Lake Ontario in the Town of Somerset (Niagara County) has been identified as an alternative for a proposed New York State Electric and Gas coal fired power plant. If selected, the proposed plant would be rated at 850 MWe and scheduled for commercial operation in 1982. The size of the proposed site would indicate a capacity of approximately 3,500 MW. Such a plant would require 1,000 acres and utilize a once-through cooling system with off-shore intakes and discharges.

b. Impact on GAPC - Lake Ontario has been identified as a geographic area of particular concern within the Erie and Niagara Counties coastal zone program. The proposed facility would utilize the lake for water intake and discharge processes. The portion of Lake Ontario adjacent to the site has been identified as a significant spawning area for warm water game fish. Therefore, proper environmental safeguards would be necessary prior to construction within the fishery area.

c. Alternative Location - The New York State Electric and Gas Corporation has made application under Article VII of the Public Service Law for certification of a proposed coal-fired generating plant adjacent to Cayuga Lake in Tompkins County, New York. The Tompkins County site has been cited by the New York State Electric and Gas Corporation as the preferred location for the plant with the Town of Somerset (Niagara County) site selected as an alternative location for the plant.

6. NIAGARA RESERVATION STATE PARK

a. Description - The park is situated in the City of Niagara Falls, and encompasses the Niagara Falls geologic formation. It consists of 435 acres and attracts over 4,000,000 annual visitors.

b. Impact on GAPC - The Niagara Reservation State Park has been identified as a GAPC in the bi-county coastal zone program. The park has a direct economic and aesthetic impact on the surrounding area. A major tourist trade has developed in the region resulting from the Niagara Falls attraction. It is estimated that \$150,000,000 in tourist-oriented sales occur annually in the City of Niagara Falls, New York.

The major environmental impacts of the Falls formation are positive and serve to educate numerous observers relative to various geologic formations. However, negative impacts may occur if proper site design is not executed and incompatible land uses are allowed to occur within or adjacent to the park site. It should be noted that the Niagara Reservation State Park has been identified as an Area for Preservation or Restoration (APR) in the second year CZM program. Such a designation is discussed as part of Task 7.3.

c. Alternative Location - Due to the geologic nature of the Niagara Reservation State Park, an alternative location is impossible.

7. LEWISTON ART PARK

a. Description - The Lewiston Art Park is a New York State facility located on 90 acres in the Town and Village of Lewiston, Niagara County. It is situated adjacent to the Lower Niagara River and offers a variety of cultural and passive recreation opportunities. The Park includes a Performing Arts Center, Amphitheater, Artel (i.e. artists exhibit area) and support facilities. During the 1976-77 season, Artpark attracted 270,000 visitors from numerous geographic areas. The above figure was provided by the Artpark staff in a telephone conversation conducted on June 7, 1977.

b. Impact on GAPC - The Lewiston Art Park has been recognized as a GAPC in the Erie and Niagara Counties coastal zone program. Various environmental impacts may occur relative to the historic sites (i.e. Indian Burial Mound, Portage Site, and Tramway) present within the park boundary. Such sites have been recognized as historic resource areas within the CZM program and warrant protection from infringing park development. In addition, significant scenic vistas are present on the Art Park site and need visual protection from contrasting structures (i.e. large buildings, scenic towers). However, such structures are not in the future plans for the Park development.

c. Alternative Locations - The Lewiston Art Park is an existing facility and alternative locations are not feasible nor being considered at the present time.

8. FORT NIAGARA STATE PARK

a. Description - The park is situated at the mouth of the Niagara River (Lake Ontario). It comprises 284 acres in the Town of Porter and serves as a major historic and recreational resource to the bi-county region. During the 1976-77 season Fort Niagara attracted approximately 454,000 tourists (figure provided by Niagara Frontier State Parks and Recreation Commission) from all regions of the United States as well as foreign countries.

b. Impact on GAPC - Fort Niagara State Park has been identified as a GAPC within the Erie and Niagara Counties coastal zone program, as well as Area for Preservation and Restoration (APR). The present park use does not cause any substantial negative environmental impacts within the GAPC.

c. Alternative Location - Fort Niagara State Park is an existing facility with permanent historic attractions (i. e. Old Fort Niagara). Therefore, alternative locations are not feasible.

9. FOURMILE CREEK STATE PARK

a. Description - The park is located along Lake Ontario within the Town of Porter. It encompasses 248 acres and offers the only major public camping ground for tourists visiting Niagara Falls and other state parks along the Niagara River. In addition to camping, the site includes significant natural resources (i. e. wetlands) which provide excellent opportunities for fishing, hiking, and other recreation uses. The park attracted approximately 64,000 visitors (figure provided by Niagara Frontier State Parks and Recreation Commission) during the 1976-77 season.

b. Impact on GAPC - Fourmile Creek State Park has been recognized as a GAPC with the Erie and Niagara Counties coastal zone program. Future plans for the park include a small boat harbor and an expanded bathing beach. Such construction would require dredging, the disposal of dredged materials, and the placement of sand or other materials on the beach site. These activities would require proper environmental controls to limit water pollution, disruption of the wetland ecosystem and increased land development adjacent to the park.

Present environmental problems inherent to Fourmile Creek State Park include the water pollution of Lake Ontario. Such a problem has prevented the proper utilization of the site as a recreational bathing area.

c. Alternative Locations - Fourmile Creek State Park is an existing facility with natural resources (i.e. wetland, beach) unique to the site. Therefore, alternative locations are not feasible.

10. BEAVER ISLAND STATE PARK

a. Description - The park includes 1,018 acres in the Town of Grand Island. It is situated adjacent to the Niagara River at the point where the River divides into the East and West channels. The park offers the only public beach on the Niagara River and also includes a major public golf course. It should be noted that approximately 610,000 (figure provided by Niagara Frontier State Parks and Recreation Commission) individuals visited the park in 1976-77 season.

b. Impact on GAPC - Beaver Island State Park has been identified as a GAPC within the Erie and Niagara Counties coastal zone management program. The existing recreational facilities within the park do not exhibit any major environmental impacts on the geographic area of particular concern.

c. Alternative Location - Beaver Island State Park is an existing facility. Therefore, alternative locations are not feasible.

11. INTERSTATE 190 BETWEEN THE TOWN OF TONAWANDA/CITY OF BUFFALO MUNICIPAL BOUNDARY AND THE SOUTH GRAND ISLAND BRIDGES

a. Description - The corridor functions as a major north-south transportation route in the Erie and Niagara Counties region. It provides vehicular access to numerous employment centers in the City of Buffalo and Town of Tonawanda. The annual average daily traffic volume on the corridor ranges between 20,000 and 35,000 vehicles. The above figures were provided by the New York State Department of Transportation (NYSDOT).

b. Impact on GAPC - The regional facility does not directly impact on any geographic areas of particular concern in the bi-county region.

c. Alternative Locations - The section of Interstate 190 recognized as a regional facility is an existing corridor. Therefore, alternative locations are not being considered.

12. ROBERT MOSES PARKWAY

a. Description - The Parkway is located in the City of Niagara Falls and the Town of Lewiston. The route services automobile traffic and follows the Niagara River from the Grand Island North Bridges to the

Lewiston Art Park. The annual average daily traffic volume is approximately 7,400 vehicles. Such a figure was furnished by NYSDOT.

b. Impact on GAPC - In the City of Niagara Falls, the Parkway is located within or adjacent to the following four GAPC's: (1) PASNY Water Intakes, (2) Niagara Reservation State Park, (3) Niagara Gorge, and (4) Whirlpool State Park. The Parkway alignment in the Town of Lewiston is located within three GAPC's. These include: (1) Devils Hole State Park, (2) Robert Moses Power Plant and (3) Lewiston Art Park.

It should be noted that the Parkway functions as a limited access thoroughfare and causes the same adverse environmental impact for each of the seven GAPC's listed in the preceeding paragraph. The above geographic areas of particular concern are situated adjacent to the Niagara River and provide excellent views of the Falls and gorge area. Public access to these areas is available to automobile traffic off the Robert Moses Parkway. However, the directional sign system and entrance/exit areas off the Parkway are very poor and serve to confuse the tourist as well as endanger their safety.

Although the Parkway provides automobile access to the aforementioned GAPC's, the road prevents direct pedestrian/bicycle access from the urban areas east of the Parkway. The thoroughfare serves as a man-made wall dividing the City of Niagara Falls and the Town of Lewiston from their major scenic resource (i. e. Niagara River). This is a significant detriment to the City of Niagara Falls revitalization efforts and decreases the tourist activity on the United States side of the River.

c. Alternative Locations - The proposed LaSalle Expressway in the City of Niagara Falls would provide an alternative east-west route to those travellers visiting Niagara Falls. The proposed expressway would parallel the Robert Moses Parkway in the City of Niagara Falls approximately 2,000 feet north of the present Parkway location.

It should be noted that the New York State Department of Transportation is planning to close a portion of the Robert Moses Parkway within the Niagara Reservation State Park. Such a closing would occur in the near future and facilitate increased public use of the park lands. In the event the LaSalle Expressway is constructed, it may become feasible to close further sections of the Robert Moses Parkway system.

13. CONRAIL RAILROAD

a. Description - The rail line consists of two sections which are considered as regional facilities. The first parallels the Niagara River in the City of North Tonawanda and the Town of Wheatfield. Such a line functions

as a secondary freight line in the Conrail system. Numerous industries in the City of North Tonawanda and City of Tonawanda are serviced by the railroad. It should also be noted that in future years Amtrack will operate passenger service on the facility. This will permit efficient rail transportation to Detroit, Toronto and other metropolitan areas.

The second section of the Conrail system which has been identified as a regional facility includes the rail line extending from the Suspension Bridge in the City of Niagara Falls to the Niagara Escarpment in the Town of Lewiston. Such a line presently functions in a limited capacity and is in need of extensive repairs. However, the railroad is recognized for the potential traffic increase which may occur due to the proposed coal-fired electric generating plant in the Town of Somerset. Such a plant would utilize the line to transport coal from Lake Erie (Buffalo Port facilities) to the power plant site.

b. Impact on GAPC - The conrail section in the City of North Tonawanda parallels the North Tonawanda Coastal Open Space Area GAPC. The line is east of River Road and does not cause significant environmental impacts on the adjacent GAPC.

The second section in the Town of Lewiston parallels the Robert Moses Parkway. In the event the rail line is improved, it would serve as a scenic intrusion to those tourists visiting the state parks adjacent to the River gorge. The latter parks have been identified as GAPC's in the Erie and Niagara Counties coastal zone program. In addition to the visual impact, the improved railroad would increase the pedestrian access problems which exist in the park areas. The current access problems pertain to the Robert Moses Parkway and are discussed in Part D (11) of this section.

c. Alternative Locations - Currently there are no alternative locations for the above facilities.

14. NEW YORK STATE BARGE CANAL

a. Description - The Barge Canal section which has been identified as a regional facility extends from the mouth of Tonawanda Creek approximately one mile inland. The canal forms the boundary between the City of Tonawanda and the City of North Tonawanda. Presently, the canal uses include recreational boating and very limited commercial traffic. The potential of the canal as a major regional facility has recently increased due to a study being proposed by the U.S. Army Corps of Engineers. Such a study would examine the feasibility of improving the Barge Canal and evaluate the prospects for waterway transport of bulk commodities. The potential of the Buffalo region as a major canal transshipment point would be enhanced if the Barge Canal could function as a major coal transport route.

b. Impact on GAPC - The Barge Canal western terminus has been identified as a GAPC and an Area for Preservation or Restoration (APR) in the Erie and Niagara Counties coastal zone program. The potential commercial traffic on the waterway would cause increased development pressure for lands bordering the canal. Such pressure may result in numerous problems (e.g. aesthetic, land use, and water quality) within the GAPC. The present uses reflect a commercial waterfront trade with intervening open space areas.

c. Alternative Locations - Possible alternative transport loactions to the Barge Canal include (1) expansion of the Welland Canal system in Canada and (2) construction of a new All-American Canal. The latter alternative has been the subject of a U.S. Army Corps of Engineers feasibility study conducted in 1973. Recently, the region's Congressional delegation and numerous local officials have expressed renewed interest in the waterway and are proposing a re-study of the project. The past proposals consisted of three alternatives which were aligned in a north-south pattern through Niagara County.

15. PROPOSED AMTRACK STATION

a. Description - The proposed station will be located in the City of Niagara Falls, at North and Tenth Streets. It is situated directly east of the railroad suspension bridge which connects Canada to the United States in the City of Niagara Falls. The facility will function as either a terminal or station dependent on the type of rail traffic anticipated. It is expected that the station will service either two or four trains per day. The former service load would represent approximately 60-140 passengers, while the latter would include 100-120 travellers. The above information was provided by the Niagara Frontier Transportation Committee.

b. Impact on GAPC - The regional facility will have no major impact on adjacent geographic areas of particular concern.

c. Alternative Locations - There are no alternative locations for the above facility.

16. GRAND ISLAND BRIDGES, RAINBOW BRIDGE, SUSPENSION BRIDGE, AND WHIRLPOOL BRIDGE, LEWISTON-QUEENSTON BRIDGE

a. Description - The following identifies the location of each bridge as well as their appropriate function. It should be noted that such bridges serve as major international transportation corridors in the bi-county region.

- (1) Grand Island Bridges (North and South):
 - (a) Location - North Bridge connects Grand Island with the City of Niagara Falls
-South Bridge connects Grand Island with the Town of Tonawanda
 - (b) Function - The bridges are used for vehicular traffic
- (2) Rainbow Bridge
 - (a) Location - The bridge connects the City of Niagara Falls with the Regional Municipality of Niagara, Ontario, Canada.
 - (b) Function - The bridge carries vehicular and pedestrian traffic
- (3) Suspension Bridge
 - (a) Location - The bridge connects the City of Niagara Falls with the Regional Municipality of Niagara, Ontario, Canada
 - (b) Function - the bridge carries rail traffic
- (4) Whirlpool Bridge
 - (a) Location - The bridge connects the City of Niagara Falls with the Regional Municipality of Niagara, Ontario, Canada
 - (b) Function - The bridge carries rail and vehicular traffic
- (5) Lewiston-Queenston Bridge
 - (a) Location - The bridge connects the Town of Lewiston and the Regional Municipality of Niagara, Ontario, Canada
 - (b) Function - The bridge carries vehicular traffic

b. Impact on GAPC - The Whirlpool, Suspension, Rainbow, and Lewiston-Queenston Bridges span the Niagara River gorge which has been identified as a geographic area of particular concern in the bi-county coastal zone program. The major impacts caused by the bridges relate to the sharp contrast between the gorge and bridge structures. This contrast often detracts from the physical splendor of the gorge area. In addition to the visual impact, the bridges' termini offer opportunities for concentrated land development. Such an occurrence needs proper regulation to prevent any negative environmental impacts on the geographic areas of particular concern located at the terminus points.

It should also be noted that the Suspension Bridge is in need of extensive repairs. Currently, the bridge is characterized by rusting metal and a deteriorating paint surface. This causes a negative visual impact to those tourists viewing the gorge area. Therefore, future physical improvements (e.g. painting) to the facility should be a high priority.

The North Grand Island Bridge bisects the Buckhorn Island State Park geographic area of particular concern. The latter represents a unique nature preserve and wildlife habitat in the western New York region. The bridge facility and heavy vehicle traffic using the structure detract from the natural qualities of Buckhorn Island and upset the ecological balance of the preserve. This situation serves as a major adverse impact on the GAPC (i. e. Buckhorn Island State Park) site.

c. Alternative Locations - There are no alternative locations for the bridge facilities.

D. CONCLUSION

This report has reviewed the methodology used in identifying regional facilities and has evaluated their impact on geographic areas of particular concern. The report recognizes various facilities as having a major impact on adjacent GAPC's. Such impacts generally relate to environmental problems (e.g. visual, air, and water quality) which resulted from improper design or poor site locations. It is intended that the Erie and Niagara Counties coastal zone program will mandate appropriate performance standards applicable to regional facilities locating near sensitive coastal areas. This will serve to alleviate numerous adverse impacts and improve the overall appearance of the bi-county shoreline.

